# COMMONWEALTH OF VIRGINIA STATE AIR POLLUTION CONTROL BOARD SUMMARY AND ANALYSIS OF PUBLIC TESTIMONY FOR REGULATION REVISION D98 CONCERNING

# REGULATION FOR EMISSION TRADING NOX BUDGET TRADING PROGRAM (9 VAC 5 CHAPTER 140)

#### **INTRODUCTION**

At the November 2000 meeting, the Board authorized the Department to promulgate for public comment a proposed regulation concerning the NOx Budget Trading Program.

A public hearing was advertised accordingly and held in Richmond on August 22, 2001 and the public comment period closed on September 14, 2001. The proposed regulation subject to the hearing is summarized below followed by a summary of the public participation process and an analysis of the public testimony, along with the basis for the decision of the Board.

## SUMMARY OF PROPOSED REGULATION

The proposed regulation concerned provisions covering Regulation for Emission Trading, NOx Budget Trading Program. A summary of the regulation follows:

- 1. Article 1 establishes the general provisions covering the NO<sub>X</sub> budget trading program, specifically: purpose; definitions; measurements, abbreviations, and acronyms; applicability; retired unit exemptions; standard requirements; and computation of time.
- 2. Article 2 establishes the provisions covering  $NO_X$  authorized account representatives for  $NO_X$  budget sources, specifically: authorization and responsibilities of the authorized account representatives; alternate authorized account representatives; changing the authorized account representative and the alternate authorized account representative; changes in the owners and operators; account certificate of representation; and objections concerning the authorized account representative.
- 3. Article 3 establishes the provisions covering  $NO_X$  budget permits, specifically: general permit requirements; submission of permit applications; information requirements for the permit applications; permit contents; effective date of initial permits; and permit revisions.
- 4. Article 4 establishes the provisions covering compliance certification, specifically:

compliance certification reports; and action of the board and EPA on compliance certifications.

- 5. Article 5 establishes the provisions covering NO<sub>X</sub> allowance allocations, specifically: state trading program budget; timing requirements for allowance allocations; allowance allocations; and compliance supplement pool.
- 6. Article 6 establishes the provisions covering the NO<sub>X</sub> allowance tracking system, specifically: allowance tracking system accounts; establishment of accounts; responsibilities of authorized account representatives; recordation of allowance allocations; compliance; banking; account error; and closing of general accounts.
- 7. Article 7 establishes the provisions covering NO<sub>X</sub> allowance transfers, specifically: scope and submission of allowance transfers; EPA recordation; and notification.
- 8. Article 8 establishes the provisions covering monitoring and reporting, specifically: general requirements; initial certification and recertification procedures; out of control periods; notifications; recordkeeping and reporting; petitions; and additional requirements to provide heat input data for allocations purposes.
- 9. Article 9 establishes the provisions covering individual  $NO_X$  unit opt-ins, specifically: applicability; general; authorized account representative; applying for budget opt-in permit; opt-in process; budget opt-in permit contents; withdrawal from  $NO_X$  budget trading program; change in regulatory status; and allowance allocations to opt-in units.
- 10. Article 10 establishes the tons per control period of NO<sub>X</sub> allowances and credits for the state trading program budget and compliance pool, specifically: state trading program budget allowances; compliance supplement pool credits; total electric generating unit allowance allocations; total non-electric generating unit allowance allocations; individual electric generating unit allowance allocations.

## **SUMMARY OF PUBLIC PARTICIPATION PROCESS**

A public hearing was held in Richmond, Virginia on August 22, 2001. Twenty-four persons attended the hearing, with nine of those offering testimony; and twenty-three additional written comments were received during the public comment period. As required by law, notice of this hearing was given to the public on or about July 16, 2001 in the Virginia Register and in seven major newspapers (one in each Air Quality Control Region) throughout the Commonwealth. In addition, personal notice of this hearing and the opportunity to comment was given by mail to those persons on the Department's list to receive notices of proposed regulation revisions. A list of hearing attendees and the complete text or an account of each person's testimony is included in the hearing report which is on file at the Department.

## **ANALYSIS OF TESTIMONY**

Below is a summary of each person's testimony and the accompanying analysis. Included is a brief statement of the subject, the identification of the commenter, the text of the comment and the Board's response (analysis and action taken). Each issue is discussed in light of all of the comments received that affect that issue. The Board has reviewed the comments and developed a specific response based on its evaluation of the issue raised. The Board's action is based on consideration of the overall goals and objectives of the air quality program and the intended purpose of the regulation.

1. **SUBJECT:** Approvability Issues: State Budget

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

TEXT: A significant problem with the proposed rule is that Virginia increased its State budget for electric generating units (EGUs) beyond what was assumed for the EGUs for purposes of the full State budget in the NOx SIP Call Rule. If the Virginia EGU budget is increased, Virginia must demonstrate that it will achieve offsetting reductions from sources under one or more other sectors such that the overall State budget will be met. Virginia did not include in the package for our review any documents that demonstrate how the Commonwealth plans to meet the overall State budget.

Despite the June 8, 2001 Court decision regarding the EGU budgets in 40 CFR 51.121, Virginia should incorporate the EPA emissions budget and compliance supplement pool by reference. This way, if any changes occur to the budgets in 40 CFR 51.121, they would automatically be part of the Virginia regulations.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

2. **SUBJECT:** Approvability Issues: Size of Compliance Supplement Pool

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** Another problem is the significant expansion of the compliance supplement pool from 5,504 allowances to 6,990 allowances. The compliance supplement pool size is capped and it cannot be increased.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

3. **SUBJECT:** Approvability Issues: Definition of Allocate or Allocation

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** Since EPA is authorized to allocate allowances in the event that Virginia fails to submit an allocation to EPA (see § 96.41(b)), Virginia should retain the reference to the "Administrator" in this definition, as well as in other references to allocations throughout the regulation. EPA recommends that this definition read: "...means the determination by the permitting authority or *the Administrator of* the number *of* NOx allowances to be initially credited to a NOx Budget unit."

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

4. **SUBJECT:** Approvability Issues: Definition of NOx Budget Trading Program

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** The definition of "NOx Budget Trading Program" needs a reference to provide coordination with other trading programs, including other State NOx SIP call trading programs (§51.121) and the Federal NOx Budget Trading Program under the section 126 final rule (§52.34). One solution would be for this definition to read: "A mufti-state nitrogen oxides air pollution control and emissions reduction program established in accordance with this part, pursuant to §SI.121, or pursuant to X52.34, as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor."

<u>**RESPONSE**</u>: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

5. **SUBJECT**: Approvability Issues: Definition of NOx allowance

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

TEXT: The reference to the "Administrator" should be retained; see the comment for "allocate or allocation," above. EPA recommends that this definition read: "...means an authorization by the permitting authority or the Administrator under the NOx Budget Trading Program to emit up to one ton of nitrogen oxides during the control period of the specified year or of any year thereafter." The reference to the "Administrator" should be retained; see the comment for "allocate or allocation," above. EPA recommends that this definition read: "...means an authorization by the permitting authority or the Administrator under the NOx Budget Trading Program to emit up to one ton of nitrogen oxides during the control period of the specified year or of any year

thereafter."

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

6. **SUBJECT:** Approvability Issues: 9 VAC 5-140-40 B Applicability, fuel restrictions

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** Section B. The fuel restrictions must be retained in multiple references within this section (see § 96.4(b), (b)(1)(i), (b)(1)(iii)(A), (b)(2), and (b)(3)). The restriction is implied because the default emission rates that appear in Table LM-2 of §75.19 are limited to oil and gas-fired units. The restriction must be made explicit to avoid confusion and implementation problems. Therefore, Virginia must make this change. Section B. The fuel restrictions must be retained in multiple references within this section (see § 96.4(b), (b)(1)(i), (b)(1)(iii)(A), (b)(2), and (b)(3)). The restriction is implied because the default emission rates that appear in Table LM-2 of §75.19 are limited to oil and gas-fired units. The restriction must be made explicit to avoid confusion and implementation problems. Therefore, Virginia must make this change.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

7. **SUBJECT:** Approvability Issues: 9 VAC 5-140-40 B Applicability, 25-ton exemption

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** For the 25-ton exemption, EPA requires that the language from §§ 97.40 and 97.4(b)(4)(ii)(B) be included. This allows for explicit budget reduction. The trading program budget is reduced by the permitted budget limit. Language in §§ 97.4(b)(4)(viii) and 97.80 also needs to be added which clarified that a unit with the 25-ton exemption may not opt into the program.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

8. **SUBJECT:** Approvability Issues: 9 VAC 5-140-60. Standard requirements

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT**: Section C. 6. and 7. Retain the reference to the Administrator.

See the definition for NOx allowance, above.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

9. **SUBJECT:** Approvability Issues: 9 VAC 5-140-550 B. Banking

<u>COMMENTER</u>: Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

<u>TEXT</u>: Section B. Language is needed to coordinate the mechanism for limiting the use of banked allowances under the NOx SIP Call trading programs and the mechanism under the section 126 program. Such language would allow a single ratio to be calculated and applied in all these programs for purposes of limiting use of banked allowances. The solution that will address this deficiency is to change the definition for "NOx Budget Trading Program" as described above.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

10. **SUBJECT**: Approvability Issues: 9 VAC 5-140-870 B 1 c. Change in regulatory status

<u>COMMENTER</u>: Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** Section B.I.c. The purpose of provision § 96.87 (b)(1)(iii)(B) is to give a partial allocation to an opt-in unit that becomes a NOx Budget unit after the control period has already started. The provision § 96.87(a) is linked to provision § 96.87 (b)(1)(iii)(A)(2)) and prevents a double allocation to the unit, i.e., a full allocation as an opt-in unit and another full allocation as a NOx Budget unit. The provision is, therefore, necessary.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

11. **SUBJECT**: 9 VAC 5-140-50. Retired unit exemption

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** Section C. 6.a.(2) For the loss of an exemption, Virginia should add language to address a situation in which no permit is required. EPA intends to add clarifying language for this purpose in §97.5. EPA suggests the following: "If no permit application is required, the date on which the unit first resumes operation."

EPA also recommends that Virginia adopt language from part 97.5(c)(2) wherein owners and operators specify a general account for EPA to assign retired unit NOx allowances.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

12. **SUBJECT:** 9 VAC 5-140-60 Standard Requirements

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** Section C. 1. EPA recommends that Virginia adapt the corresponding language in § 97.6(c)(1) which provides clarification as to what NOx allowances can be deducted for.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

13. **SUBJECT:** NOx Budget Permit Contents

<u>COMMENTER</u>: Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** The phrase "...as approved or adjusted by the permitting authority" is superfluous, and can be removed. EPA has removed this language from 40 CFR part 97.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

No changes have been made to the proposal based on this comment.

14. **SUBJECT:** 9 VAC 5-140-300 Compliance Certification Report

<u>COMMENTER</u>: Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** Section B. 2. and 3. The rule provides for default methods of deducting allowances if the NOx Authorized Account Representative (AAR) wishes not to specify these items. Virginia's rule requires this. EPA notes that the compliance certification forms will continue to describe these two items as "optional" and suggests that Virginia offer its sources a choice. EPA believes that is it beneficial for the NOx AAR to have a choice and the form will continue to provide that choice.

**RESPONSE:** This comment is acceptable and appropriate changes

reflecting the intent of the comment have been made to the proposal.

15. **SUBJECT:** 9 VAC 5-140-430 Compliance Supplement Pool

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** The rationale behind having two procedures for acquiring early reduction credits from the compliance supplement pool (one to reserve ERCs and another to request ERCs) is unclear. The use of two procedures is potentially confusing and may raise administrative costs for affected units. In §96.43(f), the allocation of ERC allowances appears to depend only on requests, not reservations, of ERCs. EPA recommends a more streamlined approach.

Section D.5. and EA.b. Since the control period ends on September 30, EPA recommends that Virginia extend the deadline (currently November 1, 2003) to February 1, 2004 for the submission of the verification statement. Final data will not likely be available by November 1. The deadline (currently February 1, 2004) could be extended to April 1, 2004 to allocate the ERCs.

Section G. To ensure that the total ERC and DDC allocations do not exceed the amount of the compliance supplement pool, Virginia should clarify how the pool is to be divided between allowances available to units as ERCs, and allowances available as DDCs. While §96.43(f) potentially allocates the entire compliance supplement pool for ERCs, §96.43(h) potentially allocates the entire pool to DDCs.

**RESPONSE:** The compliance supplement pool, as designed, was done so with extensive input from both the nonEGU and EGU members of the ad hoc group and other stakeholders. Due to that extensive public input, it would not be prudent to change the procedure because EPA finds it confusing. The system will only last for the first two years of the program; therefore, no changes will be made to those provisions except with regard to the dates.

16. **SUBJECT:** 9 VAC 5-140-530 Recordation of NOx Allocations

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** EPA recommends that Virginia incorporate language from § 97.53 which clarifies the procedure that the Administrator will record NOx allowance allocations in accounts three years in advance of the relevant control period.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

17. **SUBJECT:** 9 VAC 5-140-700, 9 VAC 5-140-710, and 9 VAC 5-140-

#### 20.740 in Article 8 Monitoring and Reporting

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

<u>TEXT</u>: EPA is recommending a number of revisions to the monitoring section of all state rules, in addition to the changes resulting from the delay in the compliance deadlines. These revisions are in Part 97 and improve upon the model rule (Part 96), making the program requirements more comprehensible and, in many cases, more flexible for sources. In some cases, the language changes were made to clarify source requirements and in some cases they were made to reflect revisions to Part 75. Adopting the monitoring language in Part 97 which references the revisions to Part 75 is crucial for sources. Without these language changes, sources will not be able to take advantage of the additional monitoring flexibility incorporated into the recent Part 75 revisions. These revisions are listed in Table A and is attached for your reference.

Table A:		
	n Subpart H Monitoring and Recortkeeping of Parts 96 and 9 7 tl	hat
Reflect Recent Revis	sions to Part 75	
Provision Title	Changes to Provisions	Key
-	§97.70(c)/§96.70(c)(1)&(2) Reporting data prior to initial certification -	
Requirements	Part 97 has been revised from Part 96 to reference §75.19 and to reflect other changes to Part 75	
Monitoring - Initial	§97.71(b)(2) Requirements for recertification - Part 97 has been revised from Part 96 to reflect changes in Part 75	
Certification and Recertification		X
procedures		
	§97.71(b)(3)(v)(A) & (A)(1) Procedures for loss of certification - Part 97 has been revised from Part 96 to reference §75.20(a) (4) (iii), §75.20(b)(5), §75(20)(h)(4), §75.21(e) and to reflect changes to part 75	
		X
	§97.71(c)- Initial certification and recertification procedures for low mass emission units using the excepted methodologies under &75.19 of this chapter Entire section has been re-written and re-numbered because the	Х
	original language in §96.71 (c) was incredibly difficult for sources to comprehend and to follow.	

Monitoring - Record	§97.74(d)(1)(ii) Quarterly reports - Part 97 was revised		
	because an		
Keeping and	important reference to an earlier section was left out of 96.  Part 97		
	was		
Reporting	revised to reference §97.71(c) - Initial certification and recertification	X	
	procedures for low mass emission units using the excepted		
	methodologies under X75.19 of this chapter.		
Monitoring -	§97.74(d)(2)(ii) Quarterly reports -		
Record Keeping	Part 97 was revised because an important reference to an		
and Reporting	earlier section was left our of 96. Part 97 was revised to		
	reference §97.71(c) -Initial certification and recertification		
	procedures for low mass emission units using the excepted		
	methodologies under §75.19 of this chapter		
	in part 75 was referenced. The reference to §75.74(b) should		
	be changed		
Reporting	to reference §75.74(c)(6). Additionally, under (A) a reference		
	to		
	§97.71 (c) was added for clarification.		
* Note, if no section	* Note, if no section number is listed for part 96 then it has the same		

numbering under parts 96 and 97.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

## 18. **SUBJECT:** 9 VAC 5-140-850 Opt-In Sources

**COMMENTER:** Marcia L. Spink, Associate Director, Office of Air Programs, Environmental Protection Agency, Philadelphia, PA

**TEXT:** The phrase "...as approved or adjusted by the permitting authority" is superfluous, and can be removed. EPA has removed this language from 40 CFR part 97.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

## 19. **SUBJECT:** Support of proposed rule

<u>COMMENTER</u>: William E. Damon, Jr., Forest Supervisor, United States Department of Agriculture, Forest Service, George Washington & Jefferson National Forests, 5162 Valleypointe Parkway, Roanoke, VA 24019-3050

**TEXT**: Our review of the ample background information provided to

support Virginia's proposed NOx SIP Call rule leads us to support your modifications to EPA's rule found in 40 CFR 51.121. The preferred option to amend your October 2000 draft regulations satisfies the intent of significantly reducing NOx emissions within Virginia by 2007 and beyond. The "Town Hall Background Document" for the proposed Virginia rule lists numerous issues for public comment, followed by a section listing Department of Environmental Quality preferences. We concur with your proposed resolution of the listed public issues. Even though the State rule is in draft form at this time, it is heartening see many electric utilities in Virginia moving ahead with the installation of selective catalytic reduction equipment to reduce NOx emissions in a timely manner.

**RESPONSE**: Support for the proposal is appreciated.

20. **SUBJECT:** Concur with general strategy to implement the NOx SIP Call

<u>COMMENTER</u>: William E. Damon, Jr., Forest Supervisor, United States Department of Agriculture, Forest Service, George Washington & Jefferson National Forests, 5162 Valleypointe Parkway, Roanoke, VA 24019-3050

**TEXT:** Although we concur with Virginia's general strategy to implement the NOx SIP Call rule, the following recommendations are made in the interest of improving the proposed rule and reducing current negative effects to National Forest ecosystems.

**RESPONSE**: Support for the proposal is appreciated.

21. **SUBJECT:** Year-round implementation

<u>COMMENTER</u>: William E. Damon, Jr., Forest Supervisor, United States Department of Agriculture, Forest Service, George Washington & Jefferson National Forests, 5162 Valleypointe Parkway, Roanoke, VA 24019-3050

**TEXT:** As proposed, the rule would be in effect annually from May 1 to September 31, the time period when ozone production and negative effects to human health is most pronounced. We recommend that this rule be implemented on a year-round basis to mitigate the year-round impacts on visibility from NOx secondary pollutants and the continued acidification of already negatively impacted watersheds and associated trout streams.

**RESPONSE**: EPA has done extensive study through the Ozone Transport Assessment Group that led to the proposal of the NOx SIP Call rule. The EPA NOx SIP Call regulation also went through extensive study and public input prior to being issued as a final rule. EPA has determined based upon these data and years of research that a seasonal approach coupled with the state-wide cap on NOx emissions is the most cost- effective method to address the transport of ozone, which is the goal of this regulation (64 FR 28298). In fact, in 63 FR 57424, Finding of Significant

Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for the Purpose of Reducing Regional Transport of Ozone, EPA states:

...the suggestion that EPA analyze the costs of, and assume in calculating the budgets, annual NOx control to address non-ozone problems is outside the scope of this rulemaking proceeding. Here, EPA has proposed a NOx SIP call to address the failure of certain SIPs to prohibit sources from emitting NOx in amounts that contribute significantly to nonattainment (or interfere) with maintenance of attainment of the ozone NAAQS during the ozone season.

It should be noted, however, that year-round benefits will result from the regulation:

...emission modeling performed by EPA indicates that the SIP call would reduce wintertime NOx emissions. This results in part because, once installed to comply with the NOx SIP call, some NOx control systems (e.g., low NOx burners which alter the combustion process and cannot simply be turned off) would reduce emissions throughout the year, even though the NOx limits would be seasonal (63 FR 57424, January 18, 200).

No changes have been made to the proposal based on this comment.

22. **SUBJECT:** Establish allocations on a rate of 0.10 lbs/mmBtu

**COMMENTER:** William E. Damon, Jr., Forest Supervisor, United States Department of Agriculture, Forest Service, George Washington & Jefferson National Forests, 5162 Valleypointe Parkway, Roanoke, VA 24019-3050

**TEXT:** The proposed Virginia rule calculates electric generating units (EGU) and non-EGU emissions at the rate of 0.15 pounds of NOx per million Btus (lbs/mmBtu). Existing state-of-the-art retrofit technology exists today to produce 0.05 lbs/mmBtu of NOx (reference American Electric Power's 675 megawatt Somerset Unit). A new coal-fired EGU in Kentucky (Kentucky Mountain Power) was recently permitted to emit 0.07 lbs/mmBtu NOx. Therefore, instead of the proposed 0.15 lb/mmBtu emission rate, we recommend a rate no greater than 0.10 lbs/mmBtu be used; less than what you are proposing but higher than current state-of-the art technology

**RESPONSE**: EPA proposed the emissions rates for EGUs (0.15 pounds of NOx per million Btus) and nonEGUs (0.17 pounds of NOx per million Btus) after several years of study and research (see answer to 21 above.) It has been determined that these emission rates are the most cost-effective to achieve the reductions needed for reducing the transport of ozone (65 FR 2677, January 18, 2000). It should be noted that these rates will apply to existing units, some coal-fired, and do not have any impact on new source permits. New sources will need to meet Best Available Control Technology (BACT) and Prevention of Significant Deterioration (PSD) requirements.

No changes have been made to the proposal based on this comment.

## 23. **SUBJECT**: 25-ton source exemption

<u>COMMENTER</u>: William E. Damon, Jr., Forest Supervisor, United States Department of Agriculture, Forest Service, George Washington & Jefferson National Forests, 5162 Valleypointe Parkway, Roanoke, VA 24019-3050

**TEXT:** The draft rule states "core sources smaller than 25-tons/season are exempt". In general we are not opposed to this clause. Although the question arises as to how many 25-ton/season sources there are and what are their combined gross NOx emissions? Are these combined emissions significant when compared to the NOx budget for EGUs (17,187 tons/season)? If so, then we would recommend that the smaller core sources be included within the draft rule as well.

**RESPONSE**: New language has been added to better explain the 25-ton source exemption, 9 VAC 5-140-40 B Applicability (see EPA comment #7). This new language clarifies that the budget reductions for both EGU and nonEGU 25-ton sources are factored out of the source sector budgets prior to the allocation process. This ensures that the 25-ton sources' emissions are accounted for in the program.

No changes have been made to the proposal based on this comment.

## 24. **SUBJECT:** Local impacts due to trading

<u>COMMENTER</u>: William E. Damon, Jr., Forest Supervisor, United States Department of Agriculture, Forest Service, George Washington & Jefferson National Forests, 5162 Valleypointe Parkway, Roanoke, VA 24019-3050

**TEXT:** We are supportive of the NOx trading provisions of the proposed rule. However, we are concerned that unrestrained trading may result in local areas with high NOx emissions, whereas the State as a whole would be complying with NOx reductions called for in the proposed rule. This could have negative impacts on air quality related values at James River Face Wilderness, the Class I area we manage. How will the State monitor NOx trading so that certain local areas do not see stagnant or increasing NOx emissions'?

RESPONSE: It is suggested that trading of emission allowances could create local areas of ozone concentration, i.e. "hot spots," in metropolitan areas of Virginia like Richmond or Northern Virginia. In 65 FR 2693 EPA indicates that it does not believe that the trading of emission allowances under the NOx SIP Call Rule would have such an effect: "The Agency's [EPA's] analysis in conjunction with the NOx SIP call demonstrates that implementation of a single trading program with a uniform control level results in no significant changes in the location of emissions reductions, as compared to a non-trading scenario (see chapter six of the Regulatory Impact Analysis for the NOx SIP Call)." The EPA continues: "Therefore, trading among sources in states with a NOx Budget Trading Program...will achieve the intended emissions

reductions, while simultaneously providing both flexibility and cost savings to the covered sources."

In the Notice of Proposed Rulemaking (NPR) EPA defined the issue more clearly:

[U]nhealthful levels of ozone result from emissions of NOx and VOCs from thousands of stationary sources and millions of mobile sources [and consumer products and other sources] across a broad geographic area. Each source's contribution is a small percentage of the overall problem; indeed, it is rare for emissions from even the largest single sources to exceed one percent of the inventory of ozone precursors even for a single metropolitan area. Under these circumstances, even complete elimination of any given source's emissions may well have no measurable impact in ameliorating the nonattainment problem. Rather, attainment requires controls on numerous sources across a broad area. Ozone is a regional scale problem that requires regional scale reductions (63 FR 57375).

It should also be noted that, should a local air pollution problem be determined, the DEQ has the authority to amend permit conditions to protect public health.

No changes have been made to the proposal based on this comment.

#### 25. **SUBJECT:** Cost of electricity

**COMMENTER:** William E. Damon, Jr., Forest Supervisor, United States Department of Agriculture, Forest Service, George Washington & Jefferson National Forests, 5162 Valleypointe Parkway, Roanoke, VA 24019-3050

TEXT: The "Town Hall Background Document" includes a section titled "Issues, 1. Public". Within that section it is stated, "If the cost of control is excessive, the additional costs may be passed on to the consumer in the form of rate hikes." This statement begs the question "What are the costs, both environmental and health, from high levels of NOx emissions and associated secondary fine particulate matter production?" If consumers were presented with a full accounting of higher energy costs balanced against reduced health and environmental risks, or paying less in energy costs but with increased risks, it is not clear to us that consumers would object to higher energy costs.

**RESPONSE**: The comment does not address the proposed regulation per se, but rather the agency background document. No specific recommendation has been made to the proposed regulatory language.

No changes have been made to the proposal based on this comment.

26. **SUBJECT**: Concur with general strategy to implement the NOx SIP Call **COMMENTER**: Douglas K Morris, Superintendent, United States

Department of the Interior, National Park Service, Shenandoah National Park, 3655 U.S. Hwy. 211 East Luray, VA 22835-9036

<u>TEXT</u>: Our review of the alternatives considered by Virginia and other information provided that is relevant to the proposal leads us to support the Commonwealth's preferred option of amending the October 2000 draft regulations to satisfy the provisions of applicable law and associated regulations and policies. More specifically, we believe that adopting measures that meet the intent of the EPA NOx, SIP Call implementing regulations, as well as the amended Virginia legislation authorizing development of the NOx, control program, is necessary to assure an approvable and viable plan at the state level. This course of action also offers the Commonwealth of Virginia the opportunity to incorporate measures that will ensure potential for continued economic growth while providing benefits to both human and environmental health through improved air quality.

Through its regulatory review package (Virginia Regulatory Town Hall - Form: TH-02), the Virginia Air Pollution Control Board and Department of Environmental Quality (DEQ) have discussed a number of issues and potential positions the Commonwealth could take in adopting the NOx, Emissions Budget Trading Program. With regard to the "Additional Issues for Public Comment", the DEQ has expressed its preferred position on the issues. The NPS believes that all of the Department's stated preferences are reasonable and would serve to expedite approval and implementation of the program if adopted by the Air Pollution Control Board. These choices include: (1) adopting EPA NO., emissions budgets by reference in the rule; (2) individual unit allocations occurring subsequent to rule adoption and final EPA emissions budgets; (3) reconciling differences between the draft October 2000 State rule by incorporating EPA's recent recommendations on the requirements; (4) creating new source set-asides for both electric and non-electric generating units (EGUs and nonEGUs) based on EPA methodologies; and (5) establishing by rule an equitable allocation and distribution system for both EGUs and nonEGUs.

**RESPONSE**: Support for the proposal is appreciated.

27. **SUBJECT:** Establish allocations on a rate of 0.10 lbs/mmBtu

**COMMENTER:** Douglas K Morris, Superintendent, United States Department of the Interior, National Park Service, Shenandoah National Park, 3655 U.S. Hwy. 211 East Luray, VA 22835-9036

**TEXT:** You may know that over the years the NPS has often voiced concerns about the degraded quality of the air and air quality-dependent resources of the park units we manage in and near the Commonwealth of Virginia. These concerns have not diminished, and in fact have been increasing as we see more development activities planned in the State that bring more air pollution into our managed areas. While we do support newer, cleaner facilities over older, more polluting ones, we have seen that new development tends to supplement, rather than actually replace older,

dirtier sources of air pollution.

The new NOx, control program will provide benefits to both local and region-wide air quality by substantially lowering the total amount of nitrogen oxides allowed statewide by certain source types, and we support that purpose. However, we recommend a NOX emission rate no greater than 0.10 lbs/mmBtu, which is more stringent than Virginia's proposed 0.15 lbs/mmBtu, but technologically achievable and less stringent than the current state-of-the-art technology.

**RESPONSE**: Please see response to comment #22.

No changes have been made to the proposal based on this comment.

28. **SUBJECT:** Cost of electricity

<u>COMMENTER</u>: Douglas K Morris, Superintendent, United States Department of the Interior, National Park Service, Shenandoah National Park, 3655 U.S. Hwy. 211 East Luray, VA 22835-9036

**TEXT:** We also recommend that DEQ acknowledge in its highlights of public issues included in TH-02 the health and environmental benefits of NOx, emission controls, rather than focusing entirely on costs. Several recent surveys suggest that many consumers would be willing to pay somewhat higher energy bills if informed of the related health and environmental benefits of air pollution control programs. We also strongly encourage Virginia to consider additional measures that would further improve air quality or help ensure that unchecked growth (e.g., mobile and stationary sources) and transport of emissions do not impede the progress intended by the proposed rule.

**RESPONSE**: The comment does not address the proposed regulation per se, but rather the agency background document. No specific recommendation has been made to the proposed regulatory language.

No changes have been made to the proposal based on this comment.

29. **SUBJECT**: Take additional measures beyond scope of regulation

<u>COMMENTER</u>: Douglas K Morris, Superintendent, United States Department of the Interior, National Park Service, Shenandoah National Park, 3655 U.S. Hwy. 211 East Luray, VA 22835-9036

**TEXT:** We also strongly encourage Virginia to consider additional measures that would further improve air quality or help ensure that unchecked growth (e.g., mobile and stationary sources) and transport of emissions do not impede the progress intended by the proposed rule.

**RESPONSE**: As discussed in comment #21 above, years of study and

analysis was conducted prior to EPA issuing the federal NOx SIP call regulation. Annual NOx control or other measures to address non-ozone problems is outside the scope of this rulemaking proceeding. The federal SIP call and this particular regulation are proposed to address the failure of certain SIPs to prohibit sources from emitting NOx in amounts that contribute significantly to nonattainment or interfere with maintenance of attainment of the ozone NAAQS during the ozone season.

It should be noted, however, as indicated in the response to comment #21, that year-round benefits will result from the regulation.

No changes have been made to the proposal based on this comment.

30. **SUBJECT**: Existing source capacity and emissions growth

<u>COMMENTER</u>: Douglas K Morris, Superintendent, United States Department of the Interior, National Park Service, Shenandoah National Park, 3655 U.S. Hwy. 211 East Luray, VA 22835-9036

**TEXT:** There may be an issue related to equitable treatment of existing sources initially exempt from Virginia's NOx control program that later become large enough to qualify for inclusion into the program. In order to keep the balance of Virginia's emissions budget on target, it may be necessary to redistribute allocations as more sources come under the scope of the program.

**RESPONSE**: Changes have been made to the rule to further clarify the 25-ton exemption provisions; see comment #7. Once exempt, a source may not opt into the program. Provisions have been added to allow for periodic updates of the state budget. For a complete review of allocation methodology, please see comment #39.

31. **SUBJECT**: NOx sources not subject to the rule

<u>COMMENTER</u>: Douglas K Morris, Superintendent, United States Department of the Interior, National Park Service, Shenandoah National Park, 3655 U.S. Hwy. 211 East Luray, VA 22835-9036

<u>TEXT</u>: Are existing stationary NO, sources (EGUs and nonEGUs) that are currently not subject to the proposed rule prohibited by rule or permit from increasing their capacity ratings above the applicability limits for the NOx, control program? If not, would they become subject to the proposed rule if modifications to their -nameplate capacities increased to levels above those applicability limits? What mechanisms exist in Virginia's air regulatory programs to ensure timely applicability to and accounting of such sources under the proposed rule?

**RESPONSE:** Response to questions #1 and #2: Yes. Any existing source that increases capacity would normally be subject to the proposed rule as well as a new source review and would require a permit to construct and operate before

modifying the rated capacity. The source may be exempt from the applicability of the proposed rule only if the source met the criteria for and opted into the 25-ton source exemption. The source would be required to meet compliance in the first ozone season following the modification.

Response to question #3: All sources subject to the applicability provisions must meet compliance by 2004. New sources must meet compliance provisions for the next ozone season subsequent to the unit becoming commercially operational.

No changes have been made to the proposal based on this comment.

#### 32. **SUBJECT:** Environmental set-aside

<u>COMMENTER</u>: Douglas K Morris, Superintendent, United States Department of the Interior, National Park Service, Shenandoah National Park, 3655 U.S. Hwy. 211 East Luray, VA 22835-9036

**TEXT:** We believe the DEQ should consider creating a separate set-aside for additional environmental benefits out of its total NO. emissions budget. This set-aside could also be used to provide a cushion for growth of mobile source sectors and new economic expansion potential not included in the EGU and non-EGU set-asides. These environmental set-asides could be on the order of those for new or modified NOx control program sources (e.g., 5%) and would be available to offset growth and transport of emissions from non-program sources.

Long-term monitoring and research programs at Shenandoah National Park and recent Southern Appalachian Mountain Initiative (SAMI) and Regional Acid Deposition Model (RADM) modeling suggest that creating environmental set-asides under the NOx control program would help ensure that Virginia meets the intent of the Clean Air Act's Prevention of Significant Deterioration program "to preserve, protect, and enhance the air quality in national parks, national wilderness areas, (and) national monuments..." while insuring "that economic growth will occur in a manner consistent with the preservation of existing clean air resources"

**RESPONSE:** The suggestion for an environmental set-aside has merit. At this time, however, there is considerable uncertainty regarding the size of the state budget and appropriate growth factors. EPA is currently under a court order regarding the growth factors used in the federal NOx SIP call, and at this time the overall state budgets are in question.

There is also uncertainty for the market as a whole (over the 22-state region) and whether there will be adequate NOx allowance to support existing source operation, much less new sources. This is of considerable importance as the need for reliable and adequate electricity supply is critical for Virginia and the nation. This is also a concern for large industrial sources.

Given this uncertainty, it would not be prudent to, in essence, permanently remove or make unavailable the full complement of NOx allowances afforded to new and existing sources in the state.

No changes have been made to the proposal based on this comment.

#### 33. **SUBJECT:** Year-round implementation

<u>COMMENTER</u>: Douglas K Morris, Superintendent, United States Department of the Interior, National Park Service, Shenandoah National Park, 3655 U.S. Hwy. 211 East Luray, VA 22835-9036

**TEXT:** While it is not directly relevant to the ozone issue at hand, we also ask Virginia to consider year-round NOx controls that will more effectively mitigate oxidized nitrogen-induced deposition and haze impacts at Class I and II park units, wildernesses, and the Chesapeake Bay. The Park's visibility monitoring data reaffirm that nitrate aerosol contributions to light extinction are greater during the cool season. Moreover, recent RADM and SAMI modeling efforts reflect the importance of Virginia's contributions to oxidized nitrogen deposition at Shenandoah National Park, the Chesapeake Bay, and other Class I areas in and near Virginia.

**RESPONSE**: See response to comment #21.

No changes have been made to the proposal based on this comment.

34. **SUBJECT**: Simplified regulatory system for both EGUs and nonEGUs

<u>COMMENTER</u>: William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT:** Should the Board strive to achieve a simplified regulatory program by having both EGU and nonEGUs subject to the same allocation timeframes or should different regulatory allocation timeframes be crafted for the two sectors? This decision should be made by the Board in consultation with the affected nonEGU units.

**RESPONSE**: The Department requested specific comment on how the proposed regulation should be redrafted to meet several new requirements as a result of the legislative changes made during the 2001 General Assembly session. The law created a new source set-aside for EGUs and changed the timeframe for the initial allocation for EGUs. A question was posed regarding whether the allocation methodology should also be changed for no EGUs.

Many comments from the electric generating industry indicated that they either had no comment or made similar comments as those above.

In the interest of attempting to maintain a comprehensive and, where possible, a

simplified approach to regulation development and implementation, it will be most costeffective for the DEQ to maintain one system for NOx trading for large EGU and nonEGU sources under this particular regulation. Ensuring that the regulation is no more complex than absolutely necessary will reduce administrative and implementation costs.

It should also be noted that additional emissions trading programs may be established in the future for other source categories and other pollutants. This particular regulation is potentially the first of several trading regulations that may be crafted in a similar manner, or may be crafted in a very different way. Additional data bases may need to be developed to support these additional programs. It will be critical to ensure that the programs do not conflict or overlap. The allocation process, trading parameters and recordkeeping for both DEQ and the sources should not be complex and cumbersome, but rather as streamlined as possible.

Changes have been made to the proposal to include a nonEGU new source set-aside as well as changes to the initial allocation period so that the rule is consistent for both source categories.

35. **SUBJECT:** New source set-aside for nonEGU sources

**COMMENTER:** William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT**: This decision should be made by the Board in consultation with the affected non-EGU units.

**RESPONSE**: The Department requested specific comment on how the proposed regulation should be redrafted to meet several new requirements as a result of the legislative changes made during the 2001 General Assembly session. The law created a new source set-a-side for EGUs and changed the timeframe for the initial allocation for EGUs. A question was posed regarding whether the regulation should be changed to create a new source set-aside for nonEGUs.

Many comments from the electric generating industry indicated that they either had no comment or made similar comments as those above.

Changes have been made to the proposal to include a nonEGU new source set-aside as well as changes to the initial allocation period so that the rule is consistent for both source categories. Please see response to comment #34.

36. **SUBJECT:** Where should the EGU new source set-aside come from?

<u>COMMENTER</u>: William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774 **TEXT:** The set-aside should be taken from the entire state budget first, to the extent that the set-aside can be taken from that portion of the nonEGU budget that has not been allocated to nonEGU units.

**RESPONSE**: The Department requested specific comment on how the proposed regulation should be redrafted to meet several new requirements of the legislation changes made during the 2001 General Assembly session. One such issue was the creation of the mandated new source set-aside for EGUs.

The public was asked where the EGU set-aside should come from. It has been determined that the set-aside budget should be created from the EGU baseline budget and not from other source sector categories. The entire state budget mandated by EPA includes budgets for area sources (including smaller NOx sources not covered by this regulation), nonroad sources, highway sources as well as the large NOx nonEGU and EGU sources covered by this regulation. The mechanisms for trading, selling, buying and banking allowances are outlined for the large nonEGU and EGU sector sources and are addressed in this first phase of the SIP call. These concepts are predicated on previous experience from the acid rain program.

However, the details of trading for other source categories, such as area or mobile sources, has not been clearly identified. The next phase of the program must still be addressed, several years in the future, with the existing budgets created by EPA. The details of that program have yet to be decided. To reduce the size of the other categories' budgets without further information as to what will be required for those other source sectors would not be prudent at this time. Significant growth in all source categories, especially mobile and area sources is expected; however, it is very unclear if any trading mechanism will be able to be put in place for those source categories, making compliance with the EPA budgets a potentially expensive and or severely restrictive.

No changes have been made to the proposal based on this comment.

#### 37. **SUBJECT:** Distribution of new source set-aside

**COMMENTER:** William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT:** The set-aside should be distributed annually on a pro rata basis to all new generating units that demonstrate that they qualify for an allocation from the new source set-aside budget and request an allocation at least 30 days prior to the date that the DEQ must submit the NOx allowance allocations to the Administrator. For the first allocation period, this would mean any unit that is not listed in the table in 9 VAC 5-140-940, but has begun commercial operation on or before March 1, 2004. Requests received after March 1, 2004 would be included in the allocation of the set-aside for the following year. Since the initial allocation period for existing EGUs is five years, a "new" unit would continue to receive an allocation annually from the new source set-aside for

each of the five years of the initial allocation period, then the unit would be considered an existing unit and receive its allocation from the existing EGU budget. Although the new unit would receive an allocation from the new source set-aside for each of the five years in the initial allocation period, the allocation itself would have to be recalculated every year to consider the addition and deletion of other units in the "new unit" category.

We recommend basing the distribution of the new source set-aside budget on the maximum design heat input of the unit since the new units do not have historic heat input on which to base the allocation. That is, DEQ would total the maximum design heat input of each of the units that requested an allocation, and distribute the allowances in proportion to the individual unit's heat input as a percentage of the total. This method of allocating allowances from the new source set-aside budget should be used for allocations made both during the initial five-year period (when the new source set-aside is 5% of the existing EGU budget) and in subsequent periods (when the new source set-aside budget is reduced to 2% of the existing EGU budget).

As with the existing units, if the new unit does not use all of its allocated allowances, the remaining allowances could be banked or sold.

**RESPONSE:** The Department requested specific comment on how the proposed regulation should be redrafted to meet several new requirements of the legislation changes made during the 2001 General Assembly session. One such issue pertained to the distribution of the mandated new source set-aside for EGUs.

The public was asked to comment on how the set-aside should be distributed: on a first-come, first-served basis; distributed equally to all requesting a portion of the set-aside; auction; some other method?

This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal. Changes to the regulation do reflect criteria as to who qualifies for any new source set-aside as well as a pro rata basis for distribution of the new source set-aside. However, the date for notification has been changed from March 1 to January 1.

38. **SUBJECT:** Definition of "New generating facilities"

<u>COMMENTER:</u> William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT:** The term "new generating facilities" should apply to each new generating unit that has begun commercial operation, but does not receive an allocation as from the existing EGU budget. For the initial five-year allocation period, this would mean any unit that has begun commercial operation on or before March 1, 2004 but is not listed in the table in 9 VAC 5140-940. Allocations should be available to all units that demonstrate that they meet the definition of "new generating facilities" and request

an allocation at least 30 days prior to the date that the DEQ must submit the NOx allowance allocations to the Administrator. For the first allocation period, this would mean on or before March 1, 2004. Requests received after March 1, 2004 would be included in- the allocation of the set-aside for the following year.

As noted in the previous response, we recommend that each new unit receive an allocation annually from the new source set-aside budget until it begins receiving an annual allocation from the existing EGU budget.

**RESPONSE:** The Department requested specific comment on how the proposed regulation should be redrafted to meet several new requirements of the legislation changes made during the 2001 General Assembly session.

One such issue pertained to the mandated new source set-aside for EGUs. The public was asked to provide comment on how the term "new generating facilities" referenced in the legislation be defined, i.e. who is eligible for the set-aside? Is the set-aside available to all sources that didn't receive an initial allocation? Is the set-aside only for sources that receive a first-time permit in that calendar year? Should the set-aside be made available only when a source actually begins to operate?

Language from 40 CFR part 97 has been incorporated as to the issues of what constitutes a "new generating facility." This is a reasonable approach since Part 97 language was developed after extensive public comment.

This language provides for a set-aside if the source has been issued a new source review permit or other appropriate permit and has made a request for the set-aside by January 1 of the control period year. Again, the source must already have a permit prior to the request being made. The set-aside will be distributed on a pro rata basis among all sources that made the request.

#### 39. **SUBJECT:** Subsequent allocations

**COMMENTER:** William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT:** Following the initial five-year allocation period, allocations should be made on an annual basis, for the control period five years in the future. For example, the first allocation (following the initial allocation period) would be made April 1, 2004 for the 2009 control period. This allocation would be based on historic heat input for the 1999-2003 control periods. Units with at least two control periods of historic heat input data would be included in the allocation of the existing EGU budget.

**RESPONSE:** The Department requested specific comment on how the proposed regulation should be redrafted to meet several new requirements of the legislation changes made during the 2001 General Assembly session.

One such issue pertained to subsequent allocations based on the mandated five-year initial allocation for EGUs. The public was asked to provide comment on how subsequent allocations should be computed: annually or less frequently? If less frequently, how much less and why?

Many commented on how subsequent allocations should be administered. The department has determined that the EPA method for subsequent allocations for the section 126 final rule (40 CFR Part 97, 65 FR January 18, 2000) is a reasonable approach and has incorporated the methodology from Part 97 into the Virginia rule. As previously noted, CFR Part 97 is the result of significant comment and analysis.

In determining the subsequent allocation methodology for CFR Part 97 EPA stated:

...the agency proposed to use the same allocations for the first 3 years of the program, unless a state replaces a section 126 action with its own allocations in an approved SIP. After the initial three year period, EPA proposed to update the allocations on an annual basis 3 years prior to the relevant control season.

The Agency received numerous comments arguing against the proposed schedule and supporting longer-term or permanent allowance allocations. Several commenters suggested that the proposed schedule would be administratively cumbersome and would create uncertainty and risk for sources regarding investments in control technologies. Two commenters stated that annually updating allocations would provide incentives to generate more electricity and create market distortions and that EPA has not fully evaluated all of the implications of updating the allocations. These commenters (as well as others) expressed support for 5 to 10 year allowance allocations.

Other commenters favored some form of updating of allocations, provided the updates were done based on output data rather than heat input data. Another commenter noted that EPA should periodically re-allocate NOx allowances based on actual operating performance of the sources. These commenters noted that updating an output-based allocation system has the potential to reward and encourage efficiency.

The Agency agrees with the commenters who suggested that updating an output-based allocation system has the potential to reward and encourage efficiency, but also agrees with the commenters who stated that updating allocations, whether input or output, provide incentives to generate more electricity.

The Agency commissioned an analysis of the impacts of permanent allocations versus updated allocations in order to respond to the comments received on the proposal and to assist in determining the most appropriate method for distributing NOx allowances. The results of the analysis as well as a description of the methodology can be found in the report "Economic Analysis of Alternative Methods of Allocating NOx Emissions Allowances" (Docket A 97-43, Category XI-B-01). The analysis described in the allocation report predicted that updating allocation systems when compared to permanent allocation systems will result in generally lower nationwide emissions (NOx as well as some ancillary emissions), and, in particular, more generation in the capped region, and so less NOx emissions increase (i.e., "leakage") outside the capped region....

However, rather than an annual updating approach as proposed, the Agency will update the allocations every 5 years. Updating the allocations every 5 years provides a reasonable balance between two important but countervailing factors: (1) accommodating changing electricity market conditions (by incorporating new sources and reflecting generation changes) and encouraging generation efficiency that can result in ancillary environmental benefits, and; (ii) giving sources more certainty for their compliance planning. The first factor tends to support more frequent updating, while the second factor tends to support less frequent updating.

Most of the commenters suggested that EPA issue allocations for a longer time period (at least 5 years). The Agency agrees with the commenters that an annual updating system could create a level of uncertainty for sources that may interfere unduly with compliance planning and cause market distortions even though that uncertainty is reduced by issuing the allowances at least 3 years prior to the relevant control period.

Therefore, the final Virginia NOx Budget Trading Rule provides for an initial five-year allocation for both EGU and nonEGU sources beginning in 2004. An update of allowance allocations will be make in the 3<sup>rd</sup> year of the block. Subsequent allocations will be made in 5 year blocks with updates in the 3<sup>rd</sup> year of the block.

Example: Units Operational before May 1, 1998 Initial allocation, 2004 - 2008

> Units Operational before May 1, 2004 Update: 2006

Subsequent allocation, 2009-2013

Units Operational before May 1, 2009 Update: 2011 Subsequent allocation, 2014-2018

At a minimum, sources will know three years in advance the allocation for a specific control period; at a maximum, seven years.

40. **SUBJECT:** State Budget

<u>COMMENTER:</u> William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT:** In response to the Department's request for comment on how to redraft the proposed regulation to address the EPA comments in combination with the court decision, we agree with the Department's inclination that the budget should be lowered to meet the EPA budget. While we believe that the Department's proposed budget more accurately reflects the actual emissions generated in Virginia during the years designated for the inventory development, and we support the Department in its efforts to correct the EPA inventory, we do not want to jeopardize the approvability of the proposed rule and encounter the sanctions proposed by the EPA.

**RESPONSE:** Support for the proposal is appreciated. The proposal has been modified to reflect the EPA requirements in comment #1.

41. **SUBJECT:** 9 VAC 5-140-940, Specific unit initial allocation

<u>COMMENTER:</u> William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT:** We also agree that the rule should be revised to accommodate the possibility that the budget may be revised in response to the court remand. However, instead of removing the initial allocations from the rule entirely, we recommend that the allocations be presented in the table in 9 VAC 5-140-940 as a percentage of the final budget instead of in tons of NOx.

**RESPONSE**: Changes have been made to the proposal due to the EPA comments #1 (state budget) and #7 (25-ton unit exemption). As a result of those changes it will not be possible to provide a percentage for the individual unit allocation. The 25-ton unit exemption requires that the emissions from those units be deducted from the allocation budget prior to making any allocations. At this time it is unknown as to which units might exercise the exemption provisions; therefore, the exact percentage of the remaining units subject to the program cannot be made.

The individual base units subject to the program will not be listed in the regulation. A

specific formula that will indicate how the budget will be allocated has been provided.

No changes have been made to the proposal based on this comment.

42. **SUBJECT:** Five-year heat input data allocation methodology

<u>COMMENTER</u>: William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT:** In addition to responding to the requests for comments on specific issues, we also submit two comments on the proposed allocation methodology. First, we recommend that the percentages in the table in 9 VAC 5-140-940 for the initial allocation be based on five years of historic input data (1995-1999) instead of the four that were used to calculate the allocation in the current table (1995-1998). Using five years of historic data would make the initial allocation methodology more consistent with the methodology laid out for subsequent allocations.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

43. **SUBJECT:** Allocations based on permit limits

**COMMENTER:** William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

TEXT: Second, the allocation methodology in 9 VAC 5-140-420 states that the allocation would be made on the basis of "0.15 lb/mmBtu or the unit's permitted NOx limit (expressed as lb/mmBtu), whichever is less". We recommend that all the units listed in the table in VAC 5-140-940 receive allocations at the rate of 0.15 lb/mmBtu regardless of their prevailing permit limits. Units that enter the pool for allocations from the existing EGU budget following the initial allocation period should receive allocations as stated in the proposed rule.

**RESPONSE**: Many comments were received regarding whether the allocation should be based on 0.15 lb/mmBtu (0.17 lb/mmBtu for nonEGUs) or the unit's permitted NOx limit (expressed as lb/mmBtu), whichever is less. Not surprisingly, sources that are permitted below the proposed rate of 0.15 lb/mmBtu do not want the allocations based on their permit limit. This position is certainly understandable as it would result in a "surplus" of allowances that could either be sold or banked. This would be good for the newer sources that have already invested in the cleanest control technology already required by BACT or PSD requirements.

The other side of the argument is that the state budget is based on the existing source inventory, reduced by 60 percent. These sources were previously permitted to operate at one emissions rate and now must either find/buy additional allowances or spend capital to add on control technology to meet the new base emission rate. The EGU

sector also has the issue of commitments required by the State Corporation Commission to provide adequate and uninterrupted power to Virginia customers through 2007, the year that the deregulation transition period ends.

The issue of reliable, uninterrupted power to all Virginians is of paramount importance. Many of the new facilities are not yet operational, some facilities may not be permitted, some that are permitted may not get built. If built, there are no guarantees that the electricity generated will serve Virginians; it may be sold on the grid to the highest bidder whose customers are located outside of Virginia.

No changes have been made to the proposal based on this comment.

44. **SUBJECT**: Definition of "unit's permitted NOx limit"

**COMMENTER:** William A. Butler, Environmental Engineer, Mirant Mid-Atlantic, LLC 8711 Westphalia Road, Upper Marlboro, MD 20774

**TEXT:** Additionally, the phrase "unit's permitted NOx limit" needs to be clarified since many units have multiple permit limits for NOx emissions depending on which of the permitted fuels it is burning and/or under which of its permitted operating scenarios it is performing. We suggest specifying "the least stringent of the unit's permitted NOx limits".

**RESPONSE**: Several comments were received indicating that a unit may be permitted on two different fuels, a primary fuel for operation as well as a back-up fuel. The permit limits may be different, depending on the fuel; therefore, the proposal has been modified so that the permitted limit will mean the limit for the fuel that is used for primary operation, not backup.

This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

45. **SUBJECT**: State Budget

**COMMENTER:** Donna M. Reynolds, Director, American Lung Association of Virginia, 9221 Forest Hill Avenue, Richmond, Virginia 23235-6876

<u>TEXT</u>: It is our understanding that the U.S. Environmental Protection Agency has indicated in writing that the Virginia NOx Budget Trading Program in its current version will NOT be approved due to the fact that Virginia increased its State budget for electric generating units (EGUs) beyond what was assumed for the EGUs for the purposes of the full State budget in the NOx SIP Call Rule. Additionally, the Virginia NOx Budget Trading Program has significantly expanded the compliance supplement pool from 5,504 allowances to 6,990 allowances.

As a member of the Ad Hoc Advisory Group assisting with the development of the

proposed regulation in Virginia, the American Lung Association of Virginia opposed increasing the State budget as well as the increases in the compliance supplement pool. Our opposition was also shared with members of the Virginia Air Pollution Control Board.

At this time in the regulatory process, the American Lung Association of Virginia reiterates its public opposition to the increase in the State budget and the compliance supplement pool. These efforts to expand the State budget and compliance supplement pool will essentially result in fewer pollution reductions across the Commonwealth.

**RESPONSE:** This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal. Please see response to EPA comment #1.

46. **SUBJECT**: Timely implementation

<u>COMMENTER</u>: Donna M. Reynolds, Director, American Lung Association of Virginia, 9221 Forest Hill Avenue, Richmond, Virginia 23235-6876

**TEXT:** The American Lung Association of Virginia strongly supports the timely implementation of the NOx SIP Call to reduce ozone levels and protect the health of all Virginians.

**RESPONSE**: Support for the proposal is appreciated.

47. **SUBJECT:** Economic Development a threat to Virginia

<u>COMMENTER</u>: Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** Many new sources of NOx will soon be in operation due to deregulation of the electric generation industry. These new sources pose a threat to our air and water quality and the very land our members -- and other Virginians -- are seeking to protect. Even with the NOx SIP Call in place, realized reductions will not protect the citizenry of Virginia in the short-term. Certain areas may actually see notable increases in Nitrogen Oxides due to the clustering of multiple sources.

**RESPONSE**: New development does not mean a threat to the people of Virginia, but rather new opportunity and new jobs, not necessarily at the expense of the environment. New sources locating in Virginia must meet best available control technology (BACT) and/or if warranted, prevention of significant deterioration (PSD) requirements. Location of new technology and new jobs have traditionally been viewed in a positive light, particularly since new industries utilize innovative and cost-effective pollution control equipment.

Extensive modeling is required taking into account existing and newly permitted sources

as part of the permit evaluation process. Where potential problems are found to exist due to a proposal from a new source looking to locate in an area, either the permit is denied, or the proposal must be modified to ensure that no air quality violation will occur.

No changes have been made to the proposal based on this comment.

48. **SUBJECT**: Simplified regulatory system for both EGUs and nonEGUs

<u>COMMENTER</u>: Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** No comment at this time.

**RESPONSE**: Please see response to comment to #34.

49. **SUBJECT**: New source set-aside for non-EGU sources

**COMMENTER:** Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** Yes. A set-aside must be created for the nonEGUs. Virginia is facing the scenario of an almost 100% increase in the number of current generating units which can argue a necessity. Many new power plants (approximately 30) are proposed for Virginia, and many more on the way. Most of the proposals are from companies with no existing generation capacity in the state. In order to properly ensure their help in realizing reductions of NOx, they must have their own set-aside.

**RESPONSE**: Even though the commenter indicated a new source set-aside should be created for nonEGU units, the justification for the response was in relation to the potential growth of EGUs not nonEGUs. No changes have been made to the proposal based on this comment; however, a new source set-aside for nonEGUs has been created. Please see response to comment #34.

50. **SUBJECT:** Set-aside budget

<u>COMMENTER</u>: Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** Should the set-aside mandated by legislation be taken from the entire state budget or only from the EGU sector budget? No comment at this time.

**RESPONSE**: No changes have been made to the proposal based on this comment. Please see response to comment #36.

51. **SUBJECT:** Distribution of set-aside

**COMMENTER:** Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** How should the set-aside be distributed: on a first-come, first-served basis, distributed equally to all requesting a portion of the set-aside, auction, or some other method? The set-aside should first benefit the cleanest facilities providing the most generation for Virginia's needs. This would help to ensure that Virginia would attract the best environmental proposals while securing any needed generation to meet a reasonable margin of reserve.

**RESPONSE**: The sources requesting the new source set-aside will not have a previous operation history from which to gather the information needed to determine how much or which customers are receiving the electricity they are generating; hence the name, "new source." To gather that information would require several seasons of operational data, thereby defeating the purposed of the new source set-aside pool, which is to provide some allowances to new sources.

No changes have been made to the proposal based on this comment.

52. **SUBJECT:** Local impacts due to trading

<u>COMMENTER</u>: Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** Virginia must take the appropriate steps to protect existing and proposed nonattainment areas. The NOx SIP Call credit program should require new sources to use credits from regions that directly impact air quality where the new source is located. Otherwise, the trading program will fail to meet its goal of improving overall air quality.

**RESPONSE:** Please see response to comment #24.

53. **SUBJECT:** Value of emissions trading

**COMMENTER:** Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** The background section of the NOx SIP Call document should be revised to address emission trading issues. To date, the State is proposing to use the trading program as the sole source of reduction. Emissions trading is not an alternative to the best control technologies, statewide offsets, etc. for proposed facilities. In short, emissions trading is only one part of a successful plan that will truly curb future increases of Nitrogen Oxides emissions. It cannot be the only initiative. Existing regulations that apply to the Northern Virginia nonattainment area must be strictly enforced.

The background section must further clarify the agency's statement that the proposed regulations will not create particular financial costs for localities. The agency appears to define "costs" quite narrowly. "Costs" are not just administrative expenses. A poorly designed trading program will create significant costs in nonattainment areas. due to health impacts. agricultural and forestry impacts, recreational and tourism impacts, and ecological impacts. With emissions trading, the impacts on localities could be significant. Specific localities might have to bear the brunt of increased Nitrogen Oxide levels. Financial costs to localities in nonattainment are significant and costs for increased hospital visits, medical bills, and loss of life to our citizens, also need to be addressed.

**RESPONSE**: The comments do not address the proposed regulation per se, but rather the agency background document. Since no specific recommendations have been made to the proposed regulatory language, no changes have been made to the proposal based on these comments.

54. **SUBJECT:** Reductions are required in addition to the NOx SIP call

<u>COMMENTER</u>: Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** DEQ must start requiring reductions now. If it doesn't, the currently proposed 30 new power plants (each emitting 0.5-2.5 tons per day of NOx) will render meaningless the reductions associated with the trading program. For this reason, all new sources of pollution should be required to offset their emissions of NOx at a minimum of a 1:1.1 ratio until reduction levels sought by the NOx SIP Call are achieved. This would ensure the public health would not be subjected to increased risks due to increases of Nitrogen Oxide levels.

**RESPONSE**: Prior to the establishment of the NOx SIP Call final regulation, years of air quality modeling and study were undertaken to determine the most cost-effective methods to address and reduce long-range transport of ozone.

...EPA has conducted additional regionwide modeling which shows that upwind reductions comparable to those required under today's rule have an appreciable impact on downwind nonattainment problems under both NAAQS. The downwind impact from each individual upwind State's reductions may be relatively small, but the impact from all upwind reductions, collectively, is appreciable. This regionwide modeling-which employs the UAM-V model relied upon by OTAG and also used by EPA...indicates, ...many other areas with nonattainment problems are expected to reach attainment based solely on the regional reductions.

...Moreover, under the 8-hour NAAQS, upwind contributions tend to be a particularly large percentage of the downwind problem. For example, along the Northeast corridor, cumulatively upwind states including adjacent states, contribute 83 percent of Washington D.C's nonattainment problem, 68 percent of Maryland's nonattainment problem; 65 percent of Pennsylvania's nonattainment problem; and 85-88 percent of each of New Jersey's, New York's, Connecticut's, and Massachusetts' nonattainment problem. These high levels of upwind contributions to widespread nonattainment problems--both near to, and far from, the upwind state--indicate that the regional reductions from the upwind areas may be expected to be useful in ameliorating downwind nonattainment under the 8-hour NAAQS (64 FR 28263-28267).

The budgets established by EPA for the NOx SIP Call include a margin for growth. The implementation schedule for the regulation cannot proceed any faster that ordered by the U.S. Circuit Court system...and current court order specifies compliance for EGUs in 2004, which is the date in this proposal. And as indicated via the modeling by EPA, as well as modeling conducted by Virginia (growth factors included), air quality will improve as a result of the region-wide reductions required by this regulation.

Just as important, however, as recently demonstrated by the blackouts in California, are sources of reliable, affordable electricity. This is just as critical to the health and well-being of the people of Virginia. Interruptions of power, otherwise know as "blackouts," can lead to very serious health impairment, ranging from heat stroke to hypothermia depending on the season, and can be a direct cause of death. An adequate and uninterrupted power supply to Virginians is a critical issue that must be considered.

It is appropriate to institute the requirements identified in the proposal first, evaluate the benefits of the program once it is operational, then determine whether additional reductions are needed.

No changes have been made to the proposal based on this comment.

## 55. **SUBJECT**: Enforcement of existing regulations

<u>COMMENTER</u>: Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** DEQ must clarify in the rule that all applicable state and federal regulations still need strict enforcement. We would recommend requiring offsets for both existing and proposed nonattainment areas.

**RESPONSE**: Such language in the regulation is superfluous. A regulation that explicitly articulates its own legal enforceability is no more enforceable than a regulation that does not. A regulation is, by definition, a rule having the force of

law. To assert this definition within the regulation itself is pointless.

It should be noted that New Source Review regulations currently exist that require offsets for major source or major modifications locating in nonattainment.

No changes have been made to the proposal based on this comment.

## 56. **SUBJECT:** Written response to comments

**COMMENTER:** Christopher Miller, President, Piedmont Environmental Council, P.O. Box 460, Warrenton, VA 20188

**TEXT:** Thank you once again for the opportunity to discuss these concerns and suggestions and we respectfully request a written response to our comments from the Department of Environmental Quality addressing our concerns.

**RESPONSE**: This document addresses all comments received pursuant to the request for public comment. It will be provided to all commenters who supplied comments and shall serve as the official written response to all commenters.

No changes have been made to the proposal based on this comment.

# 57. **SUBJECT:** EGU Budget and CSP

<u>COMMENTER:</u> Mark A. Gray, Manager, Environmental Services Division, American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215-2373

TEXT: AEP supports the DEQ's corrections to the heat input data, baseline estimates, and growth rate projections used by EPA to develop the EGU budget for Virginia. Using the highest two out of five years as a basis for baseline heat inputs assures that the impacts caused by unusual weather conditions, unexpected operational constraints, and other non-representative conditions can be excluded from the calculation. Similarly, EPA's failure to apply the 32 percent growth rate developed from its own Integrated Planning Model ("IPM") runs to the more representative baseline heat input levels calculated using this methodology resulted in a severe distortion of the Virginia EGU budget. As noted in the proposed rule, the original 32 percent growth rate shrinks to less than 5 percent if the baseline heat input levels are derived from a single year (modeled or actual), rather than more normalized heat input levels.

Moreover, the data included in the NODA does not justify EPA's original methodology and assumptions. Indeed, that actual heat input data for the entire period from 1995 through 1999 lends even greater support to Virginia's claim that its EGU budget is greatly underestimated. The data demonstrate that over the entire period from 1995 through 1999, actual heat input for existing EGUs in Virginia has increased nearly 25

percent. Therefore virtually all of the growth allowed by EPA's arbitrary growth methodology has already occurred. As the D.C. Circuit has already determined, it is not reasonable to rely upon a methodology that projects negative growth in electricity demand, and the accompanying increase in actual heat input required to supply that demand, over the six years remaining until 2007. The underestimation of the budgets for Virginia and other states results in a substantially more stringent control requirement than that assumed by EPA, and substantially higher costs of compliance for EGUs impacted by these rules. As EPA's own NODA demonstrates, actual data confirms the Court's conclusions, and requires EPA to take steps to revise its methodology.

While the same arguments presented above would also support additional growth in the CSP, AEP believes that the D.C. Circuit Court's recent orders, which will have the effect of delaying implementation of the Section 126 Rule until at least May 1, 2004, will, in part, mitigate the impact of a less-than-adequate CSP. Since the SIP was designed to allow affected sources to address resource constraints and unexpected delays in implementation that could have an adverse effect on electric reliability, and since AEP and other affected EGUs have been taking prudent steps toward implementation of the NOx SIP Call and Section 126 Rules, AEP recommends that Virginia retain the current size of the CSP, but assure that the final rules allow for utilization of CSP allowances in both the 2004 and 2005 ozone seasons.

**RESPONSE**: Support for the proposal is appreciated; however, based on comments from EPA that affect directly the approvability of the SIP submittal, the proposal has been changed to reflect the comments submitted by EPA regarding both the state budget, EGU-nonEGU budgets and the compliance supplement pool budget (see comments #1 and #2).

No changes have been made to the proposal based on this comment.

58. **SUBJECT:** Provisions for Allocating the EGU Budget and CSP

<u>COMMENTER</u>: Mark A. Gray, Manager, Environmental Services Division, American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215-2373

**TEXT:** The staff has noted that the pending EPA proceedings could result in an adjusted EGU budget for Virginia, and has recommended that the proposed rule be revised to remove the individual EGU allocations, but retain the methodology by which the individual allocations were developed as part of the final rule. This will avoid the need to conduct additional rulemaking to adjust allocations to conform to the final budget.

While AEP supports this concept, and appreciates the need for administrative flexibility, AEP also believes that Virginia must maintain a strong position with respect to the overall size of the EGU budget. AEP therefore suggests that Virginia retain a reference to the minimum number of total EGU allowances developed based on Virginia's

methodology for calculating growth in this sector, as discussed above, incorporate this number in the final rule, and use this number or any greater number authorized by a final rule issued by EPA as the basis for determining individual EGU allocations.

**RESPONSE**: Support for the proposal is appreciated; however, the concern for SIP approval is critical. Therefore, the proposal has been changed to reflect the comments of EPA regarding the budgets (see response to comments 1 and 2).

No changes have been made to the proposal based on this comment.

59. **SUBJECT:** Length of the Allocation Period and Conformity for EGU and Non-EGU Sources

<u>COMMENTER</u>: Mark A. Gray, Manager, Environmental Services Division, American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215-2373

TEXT: DEQ has also requested comment on the length of allocation periods for EGU and non-EGU sources, since the recent amendments passed by the Virginia Assembly direct DEQ only to establish an initial 5-year allocation period for EGUs. AEP believes that the NOx budget trading program will have the greatest flexibility and least cost if it is administered on a consistent basis. Therefore, AEP suggests that DEQ adopt a 5-year allocation schedule for both EGU and non-EGU sources. Such a schedule is consistent with the Section 126 Rule, has the advantage of giving sources a measure of certainty and improving the liquidity of the NOx market, and will be administratively less burdensome for the DEQ and regulated sources. Such an allocation period also, over time, could be coordinated with the 5-year term of Title V permits for affected sources, so that allowance allocation and NOx budget permit terms would be consistent with the term of Title V permits.

**RESPONSE:** Please see response to comment #39.

60. **SUBJECT:** Eligibility and distribution of allowances from the new source set-aside

<u>COMMENTER</u>: Mark A. Gray, Manager, Environmental Services Division, American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215-2373

**TEXT:** DEQ has also requested comments on the eligibility requirements for "new sources" that can participate in the new source set-aside created by the Virginia Assembly. AEP supports the distribution of allowances from the set-aside to all sources that were not included in the budgets established by EPA for the NOx trading programs because they were not operating at the time the budgets were developed.

**RESPONSE**: Please see response to comment #38.

61. **SUBJECT:** Distribution of new source set-aside

<u>COMMENTER</u>: Mark A. Gray, Manager, Environmental Services Division, American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215-2373

**TEXT:** AEP believes that distribution of allowances from the set-aside should occur on an annual basis to allow all new sources an opportunity to receive initial operating allowances until they are incorporated into the existing EGU budget.

**RESPONSE**: Please see response to comment #37.

62. **SUBJECT:** NonEGU set-aside

<u>COMMENTER</u>: Mark A. Gray, Manager, Environmental Services Division, American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215-2373

**TEXT:** AEP also supports the staff recommendation that any non-EGU set-aside DEQ elects to create should be created from the allocations for non-EGU sources, and not from the EGU budget.

**RESPONSE**: Please see response to comment #35.

63. **SUBJECT**: Simplified regulatory system for both EGUs and nonEGUs

**COMMENTER:** William H. Crouch, Jr, Director- Engineering Services, Old Dominion Electric Cooperation, 4201 Dominion Boulevard, Glen Allen, Virginia 23060

**TEXT:** As DEQ has noted, the proposed regulation will have to be amended to accommodate the requirements of the new legislation. As the legislation was specific to EGU sources, the board may wish to establish different regulatory allocation timeframes for the two sectors. While a simplified regulatory program may have appeal, the Office of Planning and Budget noted in their analysis that longer allocation periods achieve greater economic efficiencies. We recommend that the longer allocation period be adopted.

**RESPONSE**: Please see response to comment #34.

64. **SUBJECT:** New source set-aside for nonEGU sources

**COMMENTER:** William H. Crouch, Jr, Director- Engineering Services, Old Dominion Electric Cooperation, 4201 Dominion Boulevard, Glen Allen, Virginia

**TEXT:** Should the board wish to establish a new source set-aside for new non-EGU sources, it should reserve allowances from the non-EGU budget to do so. To the extent that the DEQ could account for reductions in mobile or area sources, such reductions could be used for new source set-asides, for BOTH the non-EGU as well as the EGU sectors.

**RESPONSE**: Please see response to comment #36.

65. **SUBJECT:** EGU set-aside

**COMMENTER:** William H. Crouch, Jr, Director- Engineering Services, Old Dominion Electric Cooperation, 4201 Dominion Boulevard, Glen Allen, Virginia 23060

TEXT: Old Dominion supports the establishment of a set-aside for new electric generation as directed by the legislation passed in the General Assembly this past session. In lieu of looking only at a sector by sector budget, Old Dominion recommends the DEQ first identify those reductions that can be quantified from mobile or area source sectors, and allocate such reductions to the set-aside for the EGU sector. If DEQ wishes to establish a set-aside for both the non-EGU sector as well as the mandated EGU set-aside, such reductions could be allocated to the two set-asides, presumably on a pro-rata basis. Absent sufficient reductions from the mobile or area source sectors to fully establish the required 5% set-aside for the EGU sector budget, additional allocations should come from the EGU sector budget.

**RESPONSE**: Please see response to comment #36.

66. **SUBJECT:** Distribution of EGU set-aside

**COMMENTER:** William H. Crouch, Jr, Director- Engineering Services, Old Dominion Electric Cooperation, 4201 Dominion Boulevard, Glen Allen, Virginia 23060

TEXT: Old Dominion feels strongly that the set-aside, which will be created from allocations within the Commonwealth of Virginia, should be used for the benefit of Virginia's citizens. As such, the distribution of the set-aside should give preference to those new EGUs that will be serving native load within the state. As cited above, Old Dominion is building new electric generation to continue to provide an adequate supply of electric service to its distribution cooperatives, service that is currently being provided by power purchases to serve existing Virginia customers. Old Dominion has long term contracts with each of its distribution cooperatives to meet their power supply requirements. Such contracts provide certainty that the electricity supplied by the new generation that Old Dominion is developing, will in fact be used to serve Virginia load.

**RESPONSE:** Please see response to comment #37.

67. **SUBJECT**: Five- year heat input data allocation methodology

<u>COMMENTER</u>: William H. Crouch, Jr, Director- Engineering Services, Old Dominion Electric Cooperation, 4201 Dominion Boulevard, Glen Allen, Virginia 23060

**TEXT:** In addition, Old Dominion is requesting that the allowance allocation be recomputed to accurately reflect those past practices of Old Dominion in supplying electric energy to its native load in Virginia. If DEQ cannot perform the reallocation Old Dominion is requesting that a larger proportion of the set-aside be allocated to it to efficiently and competitively serve its Virginia citizens in the future. The reason for this request is explained below.

Old Dominion has served its members' needs by self-generation (North Anna and Clover) and purchases from Dominion Virginia Power. Approximately 40% of the energy needs of Old Dominion during the 1995 through 1997 period, that period which was used by EPA in establishing the baseline budget, was purchased from Dominion Virginia Power. However, the state proposal to allocate allowances on a unit by unit basis provides Old Dominion only with allowances for that energy that was provided from the Clover Power Station and disregards the purchases that were made from Dominion Virginia Power to serve Cooperative loads in the state. These purchases from Dominion Virginia Power will be terminated in 2003 but the load to be served will remain. In addition, a factor of 32% was used to increase baseline emissions and allow for growth in the state. Whether or not the application of such growth factor was performed correctly is a separate issue, however the native load that was served in the 1995 through 1997 period has experienced growth. Thus Old Dominion finds itself in a tremendous disadvantage in that not only were its full load and related emissions not taken into account for its benefit, but also its load growth on that portion of load served through power purchases was not considered.

If DEQ does not correct this misallocation, Old Dominion will have to purchase additional allowances from the market to operate new units and thus be forced to serve existing load with higher cost energy. This situation will be exacerbated in a competitive power environment in that it will be more expensive for Old Dominion to serve its native customers than it would be to other utilities that may be competing to supply the same customers.

**RESPONSE**: Please see response to comment #42.

68. **SUBJECT**: Definition of "new generating facility"

**COMMENTER:** William H. Crouch, Jr, Director- Engineering Services, Old Dominion Electric Cooperation, 4201 Dominion Boulevard, Glen Allen, Virginia

**TEXT:** Old Dominion believes that any source that is subject to this rule that became operational after the baseline year on which the EPA budget was based should be eligible for allowances from the new source set-aside. A source that was operational in the baseline year but omitted from the baseline budget should be included, ONLY by increasing the baseline budget to correct the omission. The intent of the legislature seems to be clear in this regard in that on of the stated purposes is to "...encourage construction of clean, new generating facilities..." which language would support inclusion of recently constructed electric generation but not simply using the set-aside to correct errors of omission. The allocation of allowances from the set-aside should be made concurrently with the issuance of the air permit for new EGUs. Such allocation could be conditioned within the permit such that if the permit expired, the allowances would revert to the set-aside pool. In the event of delays in the scheduled operational dates, unused allowances should be returned to the set-aside for allocation to operational new generating facilities. In the event that there are unused allowances from the set-aside, such unused allowances should be redistributed back to baseline EGUs on a pro-rata basis.

**RESPONSE**: Please see response to comment #38.

69. **SUBJECT:** Subsequent allocations

<u>COMMENTER</u>: William H. Crouch, Jr, Director- Engineering Services, Old Dominion Electric Cooperation, 4201 Dominion Boulevard, Glen Allen, Virginia 23060

TEXT: Old Dominion recommends subsequent allocation periods provide some measure of certainty in the planning process. A five-year horizon provides some certainty in the selection of technology choices and development of compliance strategies. Nevertheless, electric generation plants are typically designed and constructed for at least a 30-year operational life. As new sources, which receive allowances from the set-aside, are shifted into the baseline for subsequent allocations, the continuing funding of the set-aside will diminish the absolute quantity of allowances for each individual baseline units. Old Dominion recommends that allocations for EGUs be made in five-year blocks, and that the determination of such blocks be made as early as practicable.

**RESPONSE**: Please see response to comment #39.

70. **SUBJECT**: Objection to Regulation

<u>COMMENTER</u>: Ian Cuthbertson, Plant Manager, Gordonsville Energy L.P., 115 Red Hill Road, Gordonsville, VA 22942

**TEXT**: We are writing in order to reacquaint you with our objections to the

provisions of both the state NOx SIP call, and the federal NOx budget trading program. It is our understanding that the EPA may allow each state to determine how to distribute NOx allowances under the guidance of 40 CFR Part 97 Federal NOx Budget Trading Program, this is referred to as the NOx SIP (State Implementation Plan) Call. If the state has the flexibility to allocate allowances, GELP petitions you to consider our needs and concerns. We consider this regulation to be a potential threat to our business, environmentally counterproductive, and financially inequitable.

**RESPONSE**: When the EPA first issued the federal NOx SIP Call, Virginia and a number of other states and organizations objected to the federal program to the point of suing EPA over the action. The state lost. We are required to implement the program or face federal sanctions including having EPA implement the program instead of the state. It has been determined that a state-operated program would be better for the citizens of Virginia as well as the sources operating in Virginia than having EPA operate the program. All sources subject to the program will experience additional costs to implement the requirements for monitoring and recordkeeping, if not emission reductions. The position of Gordonsville Energy is not unique.

Initial allocations will be allocated according to the procedures outlined in the responses to comments #39 and #43.

No changes have been made to the proposal based on this comment.

71. **SUBJECT:** Lack of adequate notice

<u>COMMENTER</u>: Ian Cuthbertson, Plant Manager, Gordonsville Energy L.P., 115 Red Hill Road, Gordonsville, VA 22942

TEXT: We feel obliged to object to the lack of information concerning this program. Had we been given adequate notice early in this process we would have recognized the risk it posed. The letter we received from the DEQ regarding the Southeast/Midwest Governors' Ozone Coalition dated May 12 1998, which we are now informed constituted notice, was presented as a request for information. This letter can not be considered notice of the far-reaching proposals now before us. GELP is far from alone in failing to understand the direction these inquiries were leading. Given the dilatory notification efforts, which continue, we feel the DEQ has been remiss in their duty to notify. In Virginia, only Virginia Power seems to have been well informed concerning this initiative. GELP finds this very troubling since, in our opinion, they tend to benefit the most from the current proposals.

**RESPONSE**: Notice of Intended Regulatory Action (NOIRA) was published in the Virginia Register on May 10, 1999. The NOIRA constitutes the official notice of an intention to change any regulation of the SAPCB, including this proposal. Included in the notice was a request for participation on an ad hoc group to assist the DEQ in the development of the regulation. Requests from eighteen persons to be on the ad hoc advisory group were received from fifteen organizations. All persons or

organizations who responded to the NOIRA and requested to be on the group were included. Membership of the ad hoc group included the following; Ogden Martin Systems of Alexandria/Arlington, Celanese, Old Dominion Electric Cooperative, American Electric Power, Department of the Navy, Dominion Power, Honeywell, Potomac Electric Power, VMA, Columbia Gas Transmission, Alliant Ammunition and Powder Company, LLC, American Lung Association, Virginia Department of Transportation, and the Virginia Department of Planning and Budget.

In addition to being published in the Virginia Register, notice was provided to everyone listed on the DEQ mailing list for information on changes to air regulations. Over 1000 individuals are on the department's mailing list.

A public meeting was held on June 9, 1999 and the first ad hoc group met very shortly after that public meeting (more that eight meetings were held). All meetings of any regulatory ad hoc group are open to the public. This was true for the meetings for this proposal.

After the ad hoc group completed its work, the proposal was submitted to the SAPCB for authorization to go to public comment. Once the proposal was cleared through the executive branch, each and every source was contacted via staff from the Office of Air Regulatory Development to identify appropriate contacts for both DEQ and the individual units and sources subject to the proposal. Email addresses were secured and notification of EPA workshops specifically pertaining to the NOx SIP Call were forwarded to all source contacts.

This constitutes the effort performed by the Office of Air Regulatory Development to notify sources. It should be also noted that repeated attempts were made to contact sources regarding emissions inventory data.

No changes have been made to the proposal based on this comment.

### 72. **SUBJECT:** Allocation methodology

<u>COMMENTER</u>: Ian Cuthbertson, Plant Manager, Gordonsville Energy L.P., 115 Red Hill Road, Gordonsville, VA 22942

TEXT: We have technical concerns about the draft SIP, and philosophical objections to the direction of the process itself. GELP would first like to present suggestions concerning the draft document, as they are relatively simple to address. First, unlike the federal rule the Virginia SIP states that allocations will be made on the lower of the permit limit or 0.15lb/mmbtu. We think that all the units should be allowed the 0.15 limit as a simple matter of equity. There is also ample precedent for this approach, it is Federal law, and it has been used in the North Eastern States. If this approach were adopted, GELP's fundamental objections would largely remain, but it would be a move in the right direction. We would actually prefer that all our permit limits be honored equally. If a permit limit is applied to the allocations the question remains,

what permit limit will apply. We have many. For a peaking plant, with an average dispatch time of seven hours such as GELP, as much as five hours of a dispatch can be start up and shut down. Under these circumstances it would make sense to apply the start up and shut down limit to our allocations. We would prefer that reallocation reflect the highest two years of the previous five on a rolling annual basis. This would reflect changing market conditions in a timely fashion. It is our current understanding that the reallocation will be made based on the highest two years in the five years prior to the allocation period just ended. In other words allocations for the 2009 -2014 period would be based on the highest two years in the 1998 2003 period. If we are wrong, we would be very glad to hear it, if not, could you please reconsider?

GELP consists of two separate combined cycle units utilizing, state of the art, low NOx combustors and selective catalytic reduction to control emissions. We have separate power purchase agreements with Virginia Power for both these units. Historically the utility has dispatched us about one day in four in order to meet peak load requirements. This results in a capacity factor of approximately ten percent. It also results in emissions considerably lower than our permitted annual limits.

**RESPONSE:** EPA does treat existing source allocations differently than new sources. New source allocations are based on the lesser of 0.15lbs/mmBtu or the most stringent federal/state limitation. Please see responses to comments #39, #43 and #44.

## 73. **SUBJECT**: Purpose of Trading Regulation

<u>COMMENTER</u>: Ian Cuthbertson, Plant Manager, Gordonsville Energy L.P., 115 Red Hill Road, Gordonsville, VA 22942

**TEXT:** If we understand the NOx Budget Trading Program correctly, it would seem the goal is to limit emissions to historical levels. However our power purchase agreements place no such constraint upon the utility's ability to dispatch us. The utility can require us to meet any load, within the contractual maximum output, any proportion of the time, they require. In fact our long-range business plan, based, in part, upon Virginia Powers' own forecasts, contemplates GELP moving toward base load operation in the future. We see that likelihood as a positive aspect of our business outlook. The installed emissions control equipment is carefully calculated to meet that eventuality, considering the existing permit limits.

**RESPONSE**: The purpose of the proposed regulation is to reduce the long-range transport of ozone by reducing NOX emissions, a precursor to ozone pollution, during the summer months, i.e. the control period. Trading was included as a market initiative so that the reduction in NOx emissions could be accomplished in the most cost-effective manner. Experience from Title IV of the Clean Air Act Amendments of 1990 (known as the acid rain program) has demonstrated that the trading of emissions is a very successful method to reduce emissions of sulfur oxides. It is anticipated that the NOx trading program will prove to be as successful.

The program is not a traditional command and control program that limits the amount of NOx emissions from any facility or requires a specific type of control technology, but rather provides maximum operational flexibility by utilizing the power of the marketplace to determine where reductions will come from.

The program does require that, if a unit exceeds its seasonal allocation, it must demonstrate to EPA during the true-up period at the end of the season that it has sufficient allocations, either through banking or trading allowances, to cover the tons of NOx emitted during the control period.

No changes have been made to the proposal based on this comment.

### 74. **SUBJECT:** Permit changes

<u>COMMENTER</u>: Ian Cuthbertson, Plant Manager, Gordonsville Energy L.P., 115 Red Hill Road, Gordonsville, VA 22942

**TEXT:** GELP, and other businesses like it, view the air permit as a critical and valuable part of our business strategy. No one would build a plant until the permit limits are understood, but once that permit is issued, it is relied upon as the basis for a valuable capital investment. We are very concerned about any regulatory changes that may have the effect of forcing us to default on our contractual obligations to Virginia Power, or of reducing the value of our investment.

**RESPONSE**: Any source, existing or new, must meet the requirements of all regulations promulgated by the SAPCB. In the past, criticisms were often levied against traditional command and control methods employed by environmental agencies, state or federal. Under that old scenario, a new emissions limit would be established, sources would have usually 18 to 24 months to comply, or sources would be phased into compliance, with the largest required to meet compliance first, the smallest last. Regardless of the existing permit conditions, the sources would be required to install new control equipment to comply with the new limit.

Under the scenario that incorporates market forces to achieve the most cost-effective reductions, the source has to option to either expend capital to install pollution control equipment or purchases allowances (tons of pollution) to cover its total emissions. The source has more flexibility to determine how it will come into compliance with the new requirements.

The option for market forces to play a significant role in reducing emissions is a very effective method to reduce pollution in a very cost-effective manner.

No changes have been made to the proposal based on this comment.

# 75. **SUBJECT:** Output-based NOx allowance allocations

<u>COMMENTER</u>: Ian Cuthbertson, Plant Manager, Gordonsville Energy L.P., 115 Red Hill Road, Gordonsville, VA 22942

**TEXT:** Any regulatory change that tends to preserve historical fuel consumption levels would have a counterproductive effect on ozone precursors, since it would tend to favor the existing base load plants operated by the utility, many of which use older, considerably dirtier, technology. GELP is one of the cleanest plants in the state. It is probable that the older plants in the state will remain far dirtier than GELP even after meeting the emissions goals in the NOx SIP. The cause of emissions reduction would be better served by maximizing the capacity factor of GELP and the other combined cycle peaking facilities using similar technology. This would result in a desirable reduction in emissions per generated megawatt. A standard based on emissions per generated megawatt would better support future economic growth in Virginia, which will certainly require increased generation in the years to come. Perhaps consideration could be given to assigning the cleanest combined cycle units an arbitrary capacity factor when making the allocations? A standard based on maximum design heat input and a capacity factor of 80% would have beneficial effects. These suggestions further a goal of emissions reduction, without stifling economic growth. Basic fairness demands that the primary burden should be borne by those primarily responsible for the pollution.

**RESPONSE**: As stated, the intent of the regulation is to reduce the long-range transport of ozone, not preserve historical fuel consumption levels.

Regulatory changes based on facility output as opposed to heat input have merit, and, in fact, EPA developed a methodology for developing an output-based NOx allowance allocations system. EPA oversight for consistent allowance methodologies is required to ensure that tons of emissions being traded between sources are equivalent. This reference document, however, was produced very late in the timeframe states were given to develop and submit their respective SIP submittals to avoid sanctions. In fact, the document was published after Virginia had received notice of our SIP being deficient and the sanction clock had already begun. In addition, to generate the allocations would require different data than is currently collected as part of the emissions inventory. Therefore, such an approach could not be instituted within the timeframe allowed to avoid federal sanctions.

No changes have been made to the proposal based on this comment.

76. **SUBJECT:** Compliance issues

<u>COMMENTER</u>: Ian Cuthbertson, Plant Manager, Gordonsville Energy L.P., 115 Red Hill Road, Gordonsville, VA 22942

**TEXT:** At a recent workshop our representatives were made aware that we would have to report emissions during the NOx season using Part 75 protocols of

the Acid Rain Program. Due to our low emissions we are not currently part of the Acid Rain Program. Our current permit, and the pending Title V permit, are written with Part 60 protocols in mind. So, it seems as if we may have to report all year round using Part 60 rules and submit an additional report during the NOx season using Part 75 rules. This would require installation of a new DARS and possibly new analyzers. The DEQ has suggested a schedule for certifying this new equipment that will put a real strain upon industry's ability to respond. These systems are, to a large extent, customized for the application, they are not on the shelf awaiting purchase, and there are a limited number of suppliers. We are expected to have a system installed and certified by May 2002. We have started talking to suppliers already and still may be unable to comply. The schedule takes no account of commercial reality and was apparently proposed with no input from the independent power projects. The 2002 federal certification deadline is a full year ahead of the federal program implementation date. Since the public comment period is not even over yet, the schedule seems burdensome, impractical, and out of sequence with the usual order of progression. As a practical matter we strongly suggest postponing the certification requirement until December 2002. Existing base load plants are already included in the Acid Rain Program due to their high emission levels. As a result they are already required to report using Part 75 rules and will be spared the expense and difficulty of compliance with these proposals.

RESPONSE: It is important that one not confuse regulatory programs. There are two NOx emissions reduction programs: a federal program designated under CFR Part 97 and the proposed state program, 9 VAC 5-140 et. seq. The compliance date under the federal program is May, 2003; for the state program the compliance date is May 2004. The state program will eventually replace the federal program, but not until sometime after May 2004. The monitoring requirements for the federal program must be met until such time as the state program replaces the federal program. It should be noted that the monitoring requirements in the state program reference the federal requirements as the EPA will be the agency that determines compliance and trading activities under both the federal and state programs.

Therefore, all sources subject to the federal regulation must meet the reporting requirements established by EPA. To ensure that a ton of emissions generated in Maryland and sold to a source in North Carolina is equivalent to ton of NOx generated in Kentucky and sold to Virginia, all sources must meet the monitoring requirements of Part 75. To avoid the installation of continuous emissions monitors, a source may elect to opt out of the program and meet the requirements of the opt-out provisions of 9 VAC 5-140-40.

The compliance supplement pool, which will be available for the first two years of the program, was created to provide early reduction credits and assistance to those sources that might experience trouble reaching compliance by 2004.

No changes have been made to the proposal based on this comment.

77. **SUBJECT**: Regulation excessively burdensome

<u>COMMENTER</u>: Ian Cuthbertson, Plant Manager, Gordonsville Energy L.P., 115 Red Hill Road, Gordonsville, VA 22942

**TEXT:** One of the stated goals of the NOx SIP is an equitable distribution of the financial burden. We have already mentioned the immediate cost of compliance with the Part 75 rules which, inequitably, will fall almost exclusively on the Independent Power Producers. The NOx Budget trading program also has the potential to put GELP and the other IPP's in a bad position. Most of the credits will go to the current base load plants. The IPP's will have to purchase credits from the utilities if they wish to operate at levels much above the historical capacity factor. This tends to foreclose a future business opportunity. GELP, like most of the IPP's, has a long term power purchase agreement. The energy payments in these agreements are based primarily on fuel costs. We have no means to pass along the cost of NOx credits. The other party to the power purchase agreements is the utility who, seeing a chance to sell credits to a captive customer, may have little incentive to negotiate. At GELP there are few limits on the utility's ability to dispatch the plant. This could put the seller of credits in the position of determining how many credits the customer will need. This would be very far from equitable and rewards the dirtiest producers disproportionately. At this juncture, no one can say exactly how the

NOx trading market will work, but there may be considerable potential for unfair dealing. To the extent that this occurs GELP, and other like projects, will probably be the target.

To summarize, we believe the NOx Budget Trading Program, as we understand it, could be both counterproductive from an environmental standpoint and damaging to our business. Not just our business alone, but all the combined cycle peaking units, which are, as a class, the cleanest facilities in the state. We ask that consideration be given to allowing us to continue to rely upon the existing permit limits, just as we did when making the original investment.

**RESPONSE:** The DEQ recognizes the concerns posed by GELP, but respectfully disagrees with its conclusions. GELP is not required to purchase NOx allowances from the utility it has a purchase agreement with and GELP does not have to be anyone's "captive customer." NOx allowances are being sold and traded on the commodities market at this time. Brokers are available to facilitate the buying and selling of allowances. Anyone can purchase allowances provided they can meet the price of the allowance. As with any market, prices fluctuate on a daily basis due to many different market conditions.

Experience had demonstrated that market forces can be very effective in reducing pollution, and in doing it in a manner that is very cost effective. There was widespread speculation regarding the cost of SO<sub>2</sub> allowances prior to the start of the acid rain program, but once the program became operational, market prices leveled off quickly and the price of the ton of SO<sub>2</sub> is currently an order of magnitude smaller that originally predicted. The initial goals for the acid rain program were achieved ahead of projections and, in fact, the reduction goals have been exceeded. There is no reason

to suggest that the NOx Trading program will not be as successful.

In addition, many other power producers have a very different perspective regarding the viability of the electricity market under post-NOx SIP Call and deregulation by virtue of the number of new power permit requests currently in DEQ. Some obviously feel that, requirements for NOx allowances notwithstanding, there are very good economic reasons to be in the electricity generating business.

Please see response to comment #43 regarding allocations based on existing permit limits.

No changes have been made to the proposal based on this comment.

78. **SUBJECT:** New source set-aside for EGUs

<u>COMMENTER</u>: Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

**TEXT:** First, we applaud the introduction of the new source set-aside as an important feature to meeting the goal to allow for the "continued economic growth through a program of banking and trading credits or allowances" (§ 10.1-1322.3 of the Code of Virginia). Similarly, the reduction of the initial allocation period from ten to five years will allow future allocations to track any shifts in load distribution among the affected units in a more timely manner. The proposed methodology of making the allocation based on the average heat input for the two highest of the most recent five control periods will diminish any dramatic annual swings in the allocations. Additionally, since the annual allocations for the control periods following the initial allocation period will be made five years before the control period to which they apply, the owner of the affected unit will have time to develop a compliance strategy.

**RESPONSE**: Support for the proposal is appreciated.

No changes have been made to the proposal based on this comment.

79. **SUBJECT:** Distribution of new source set-aside

<u>COMMENTER</u>: Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

**TEXT:** In response to your request for comments on how the new source set-aside should be allocated, we disagree with the stated Department inclination to recommend to the Board that the proposed regulation follow the methodology in 40 CFR Part 97 to distribute the new source set-aside allowances. The methodology in 40 CFR Part 97 provides one new source set-aside pool, accessible to both electric generating units (EGUs) and non-electric generating units (nonEGUs). We understand the new law to require a new source set-aside for new EGUs equal to 5% of the EGU

budget (17,091 tons), or 855 tons. We have no comment on whether or not a new source set-aside should be established for nonEGUs; however, if one is established, we believe that it should be a separate pool of allowances with an allocation methodology that is not necessarily the same as the one for the EGU new source set-aside. The need for, and administration of, a new source set-aside for nonEGUs is an issue best decided by the Department in consultation with owners of nonEGUs.

**RESPONSE**: Please see responses to comments #34, #36 and #37.

80. **SUBJECT:** Distribution of new source set-aside

<u>COMMENTER</u>: Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

TEXT: We advocate a methodology that would allocate allowances from the new source set-aside pool only to those EGUs that have begun commercial operations and have applied for such allocations at least 30 days before prior to the date that the Department must report the allocations to the EPA (April 1 of each year). The application for allocations from the new source set-aside pool should include a demonstration of eligibility (the unit is an affected unit that has begun commercial operations and does not have an allocation from the existing source pool for the upcoming control period) and a statement of the capacity of the unit. Following the application deadline (March 1 of each year), the Department would review the applications to confirm that each applicant qualifies for an allocation from the new sources set-aside pool and sum the capacity of all of the eligible units. Allocations would then be made on a pro-rata basis according to the capacity of the unit. Allocations from the new source set-aside would be made annually to each eligible unit until the unit has an allocation from the existing source pool for the upcoming control period.

**RESPONSE**: Please see response to comment #37.

81. **SUBJECT:** Use of allowances from new source set-aside

**COMMENTER:** Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

**TEXT:** Once allocated, the allowances from the new source set-aside pool should be treated in the same manner as allowances from the existing source pool, that is, they may be used, sold or banked by the owner. Because of the small number of allowances in the new source set-aside pool (855 tons/control period for the first five years and 342 tons/control period thereafter) and the large number of new units, we do not believe that this allocation methodology provides an unfair advantage to new sources. Allowing the new units the same trading and banking privileges as the existing units will facilitate their entrance into the NOx allowance trading market.

**RESPONSE**: The proposal has been modified by incorporating the language from 40 CFR Part 97 for regarding the allocations from the new source set-aside pool. For sources that receive allowances under the new source set-aside and generate heat input during the control period, the allowances are treated in the same manner as allowances from the existing source pool. However, under 40 CFR Part 97, EPA will take back any allowances issued to a new source that does not become operational during a particular control period.

82. **SUBJECT:** Where should the EGU new source set-aside come from?

<u>COMMENTER</u>: Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

**TEXT:** The allowances for the new source set-aside can be taken from the portion of the budget that has not been allocated to any unit. While all of the EGU budget has been allocated, and the allocations will have to be further reduced to meet the EPA budget, the allocations to the nonEGUs is less than the EPA budget by 1417 tons/control period. These unallocated allowances should be used to fund the new source set-aside and to minimize the reductions to the EGU allocations that will be required to meet the EPA budget.

**RESPONSE:** Please see responses to comments #36 and #37.

83. **SUBJECT:** State budget

<u>COMMENTER</u>: Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

TEXT: It is important to FPL Energy to be able to fully participate in the national EPA emissions trading program and as such, we urge to the Department to submit an approvable plan within the time frame mandated by the EPA to avoid sanctions for non-submittal and the imposition of a federal implementation plan (FIP). We understand that this means the allocations in the proposed rule will be reduced to meet the EPA budget, but we believe that working with a reduced number of allowances in the state plan is better than being subject to FIR We are hopeful that the EPA will adjust their budget upward after they have had time to review the comments on the assumptions made in determining the growth factors.

**RESPONSE**: Please see response to comment #1.

84. **SUBJECT**: State budget referenced in regulation

**COMMENTER:** Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

**TEXT**: On the issue of incorporating the EPA emissions budget and

compliance supplement pool by reference, we agree with the Department that the unit specific allocations (in tons) should be removed from the regulation so that the regulation would not have to be revised if the EPA modifies the budget. However, instead of leaving the entire process to be accomplished outside of the regulatory process, we recommend leaving the table in to identify the units that will be included in the allocation of the existing source budget as well as the percentage of the budget that they have been allocated for the first allocation period. In this way, it will be quick and easy to determine the allocation (in tons) once the EPA has finalized the budget.

**RESPONSE:** Please see response to comment #41.

85. **SUBJECT:** Heat input data

**COMMENTER:** Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

**TEXT:** In determining the percentage of the budget that will be allocated to each of the listed EGUs, we recommend that the Department base its calculation on the average of the two highest recorded heat inputs for the control periods between 1995 and 1999. Using five years of data instead of the four that had been used in the proposed regulation will make the initial allocation more consistent with future allocation calculations. Additionally, we recommend that the EGUs on the list continue to receive base allocations at the rate of 0.15 lb/mmBtu in future allocations, regardless of any permit limitations.

**RESPONSE:** Please see response to comments #42 and #43.

86. **SUBJECT**: Allocation based on permit least stringent limit

<u>COMMENTER</u>: Sean J. McCarthy, Doswell Business Manager, FPL Energy LLC., US Highway One, North Palm Beach, FL 33408

**TEXT:** We recommend that the EGUs on the list continue to receive base allocations at the rate of 0.15 lb/mmBtu in future allocations, regardless of any permit limitations. Base allocations to any unit that is not listed on the table (e.g. a new unit), should be calculated as in the proposed rule, with one clarification. The methodology in the proposed regulation calculates the base allocation at the rate of "0.15 lb/mmBtu or the unit's permitted NOx limit (expressed as lb/mmBtu), whichever is less". Our new units have multiple permitted NOx limits (one for each type of fuel that is permitted as well as limits for different operating modes).

**RESPONSE:** Please see response to comment #44.

87. **SUBJECT:** General comment

**COMMENTER:** Sean J. McCarthy, Doswell Business Manager, FPL

Energy LLC., US Highway One, North Palm Beach, FL 33408

**TEXT:** Again, we would like to reiterate our appreciation for this opportunity to comment on the proposed rules and commend the Department on the work it has done to date in customizing the EPA model rule for use in Virginia.

**RESPONSE**: Support for the proposal is appreciated.

88. **SUBJECT**: Support for the proposal

**COMMENTER:** Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

**TEXT:** The Electric Power Supply Association (EPSA)-would like to provide its comments regarding the Commonwealth of Virginia's intention to harmonize the state's new emissions trading program law with the DEQ's proposed emissions trading regulations. In general, EPSA supports the Commonwealth's effort to foster competition in the electric power industry and encourage construction of clean, new generating facilities.

**RESPONSE:** Support for the proposal is appreciated.

89. **SUBJECT:** New source set-aside

**COMMENTER:** Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

TEXT: EPSA appreciates and supports the amendment to the 2001 Acts of Assembly, Chapter 580 Sections10.1-1322.3, which provides a new source set-aside of NOx emissions allowances. EPSA believes the amendment is necessary to provide market access to power companies looking to invest in new generating capacity in Virginia. Over the past two decades, competitive power suppliers have led the nation to produce electricity more cheaply, efficiently and cleanly than ever before. EPSA supports market-based programs that value the environmental benefits of newer and cleaner sources and are consistent with the emerging competitive electricity market.

**RESPONSE**: Please see response to comment #88.

No changes have been made to the proposal based on this comment.

90. **SUBJECT:** Equitable allocation methodology

**COMMENTER:** Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

**TEXT**: Competitive power suppliers are investing substantial dollars in

Virginia to meet the increasing demand for electricity that supports the Commonwealth's continued economic growth. Accordingly, EPSA believes it is important to work with competitive power suppliers in Virginia to craft a workable set-aside program that will achieve the goals and objectives to develop a system that does not disadvantage new market entrants or existing market participants.

Today's electric power industry is undergoing extensive, fundamental change with the emergence of a competitive power marketplace. Competition is setting in motion a new market paradigm for the power industry. As a result of the movement toward a competitive marketplace, tens of thousands of megawatts of existing power have been sold or acquired, and will be renovated, rebuilt or replaced by their new owners. Other companies are planning the construction of tens of thousands of megawatts of new, clean and efficient generation capacity to meet the expectations of increased retail and wholesale demand, or to replace aging and inefficient plants.

These market trends require flexible and fair market-based characteristics. Therefore, EPSA strongly endorses a level-playing field environment for competition to assure fair and equitable entry into the market. New entrants should neither be advantaged nor disadvantaged in market participation; that is new market entrants should have access to a sufficient supply of allowances to operate their units.

**RESPONSE**: It is believed that an equitable system has been developed for allocation determination and distribution for both existing and new sources. Please see responses to comments #34, #35, #36, #37, #38, #39, #42, #43, and #44.

91. **SUBJECT**: Equitable allocation process

**COMMENTER**: Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

**TEXT:** The allowance allocation process should be fair and equitable.

**RESPONSE**: Please see responses to comments #39, #43 and #44.

92. **SUBJECT**: Adequate size of new source set-aside

**COMMENTER**: Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

**TEXT:** The set-asides are essential to provide sufficient allowances for all new planned generation.

**RESPONSE**: The size of the new source set-aside is based in both federal statute and state law. 40 CFR section 52.121 identifies the size of the state budget, the state law mandates that the set-aside be five percent for the first five years, two percent every year thereafter. Whether or not the pool is sufficient will depend on

the number of new sources applying for the allocations.

No changes have been made to the proposal based on this comment.

93. **SUBJECT**: Construction of new sources

**COMMENTER**: Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

<u>TEXT:</u> Construction of new, cleaner sources should not be precluded because of insufficient emission allowances.

**RESPONSE**: Availability of new source set-aside credits is not the only determining factor as to whether or not a new electric generating source will be built. Many factors must be addressed: site location, adequate water, location of gas and transmission lines, permit considerations and local population acceptance, just to name a few. Allowances for operation can be purchased from the market if necessary.

No changes have been made to the proposal based on this comment.

94. **SUBJECT**: Definition of "new generating facility"

**COMMENTER**: Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

**TEXT:** All sources that commence operation prior to or during the compliance period should be eligible to receive allowances.

**RESPONSE**: Please see response to comment #38.

95. **SUBJECT**: Allocation updates

**COMMENTER**: Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

**TEXT:** The allocation period should provide flexibility for growth. Therefore, a system for updating allowances after the initial allocation period should be adopted as a lack of allowances will provide disincentives for companies to build new capacity in that state.

**RESPONSE**: Please see response to comment #39.

96. **SUBJECT**: Competitive market place

**COMMENTER**: Lynne H. Church, President, Electric Power Supply Association, 1401 New York Avenue, 11<sup>th</sup> Floor, Washington, D.C. 20005

**TEXT:** The success of the Commonwealth's Electric Utility Restructuring Act depends on the development of an open and competitive energy market in Virginia. Consumers will be benefited only if vigorous competition exists among competing suppliers. Ultimately, EPSA supports any approach that assures new entrants and cleaner sources the same access to emissions allowances as all other market participants.

Again, EPSA appreciates the Commonwealth's recognition of the competitive power generator's earlier concerns regarding allowances for new generation and enthusiastically supports the Assembly's amendment to provide new source set-asides of NOx emission allowances in its NOx Budget Trading Program.

**RESPONSE:** Please see responses to comments #37, #38, #43, and #44.

97. **SUBJECT**: Support for the proposal

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** Through our representatives on the DEQ's ad hoc Advisory Group, the VMA participated in the drafting of the proposed NOx SIP call regulations. VMA commends the Advisory Group and DEQ staff for a job well done in drafting regulations that meet EPA's SIP call requirements with the least burden to Virginia's businesses. The proposed regulations represent the carefully crafted consensus of the Advisory Group on a number of important issues raised by EPA's NOx SIP call. With the few exceptions noted below in our specific comments, the VMA supports the regulations as drafted by the Advisory Group and proposed by the Board.

We realize that after the Advisory Group drafted the regulations and the Board approved them for publication in the Virginia Register as proposed regulations, the Virginia General Assembly passed legislation mandating several changes to the regulations. See Va. Code § 10.1-1322.3. These mandated changes affect certain aspects of the regulations applicable to electric generating units ("EGUs"). The mandated changes do not alter the proposed regulations applicable to industrial units ("nonEGUs"). Obviously, the proposed regulations must be changed to meet the statutory mandates, but we urge the Board, with the few exceptions noted below, to retain all other aspects of the regulations as drafted by the Advisory Group and proposed by the Board.

**RESPONSE**: Support for the proposal is appreciated; however, many changes were made as a result of the legislation.

98. **SUBJECT:** Size of state budget and compliance supplement pool

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** In the proposed regulations, the Board sets the numerical size of the NOx emissions budget for all regulated units in the EGU category. The proposed rule also sets the numerical size of the "compliance supplement pool," a separate pool of additional NOx emission allowances available in the first two years of the program to reward sources for early NOx emission reductions and to ameliorate the drastic initial impact of the mandated NOx emission reductions. The compliance supplement pool is available to both EGUs and non-EGUs.

The EGU NOx budget and compliance supplement pool in the proposed regulations are much larger than the EGU NOx budget and compliance supplement pool EPA set for Virginia in the federal NOx SIP call regulations. Virginia's proposed regulation, 9 VAC 5-140-920, sets the EGU NOx budget at 21,614 tons per "control period" (defined, except for the first year, as the ozone season running from May 1 through September 30), whereas EPA's SIP call regulation, 40 CFR 51.121, sets Virginia's EGU budget at 17,187 tons per control period. Similarly, Virginia's proposed regulation, 9 VAC 5-140-910, sets the compliance supplement pool at 6,990 tons per control period, whereas EPA's SIP call regulation, 40 CFR 51.121, sets the compliance supplement pool at 5,504 tons per control period.

In the preamble to the proposed regulations, the DEQ explained that it revised the Virginia NOx budget for EGUs upward using EPA's methodology. The discrepancy between EPA's and DEQ's numbers arises from the fact that EPA failed to apply the correct growth factors to scale up the NOx emissions budget due to increased demand for electricity in the future. This issue was recently addressed by the U.S. Court of Appeals for the District of Columbia Circuit. The D.C. Circuit remanded EPA's calculation of the statewide EGU NOx budgets because the agency failed to adequately justify the selection of the growth factors it used in setting the budgets. In drafting the proposed regulations, the Advisory Group agreed with the DEQ that the EGU budget for Virginia should be calculated applying EPA's methodology, but the calculations should be done correctly, as EPA failed to do.

Since the time the regulations were drafted, the DEQ has solicited comments on them from EPA Region III. Region III informed the DEQ that it would not approve Virginia's NOx SIP call regulations unless the sizes of the EGU NOx budget and compliance supplement pool were reduced to the numerical values set by the EPA in its NOx SIP call rule, 40 CFR 51.121. Thus, unless the proposed regulations are changed to comport with EPA's limits for the EGU NOx budget and compliance supplement pool, EPA Region III will not approve Virginia's NOx SIP call regulations. In such an event, EPA, not the DEQ, would administer the NOx budget trading program in Virginia, an outcome that must be avoided.

The VMA believes the proposed rules should be changed so the sizes of the EGU NOx budget and compliance supplement pool do not exceed EPA's limits. However, the size of the EGU NOx budget for Virginia, and indeed for the other states, may well change as a result of the D.C. Circuit Court's order remanding EPA's growth factors for calculating the statewide EGU budgets. Thus, VMA recommends that rather than having the Virginia regulations set the numerical limits for the EGU NOx budget and compliance supplement pools, the Virginia regulations should simply refer to the appropriate federal regulations and thereby incorporate the EPA's limits by reference. This would placate EPA Region III and facilitate the automatic change in the size of the Virginia EGU NOx budget if EPA must alter that budget as a result of the D.C. Circuit Court's ruling.

**RESPONSE:** Please see response to comment #1.

99. **SUBJECT**: Length of allocation periods

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** Under the proposed regulations, regulated EGUs and non-EGUs would receive an initial allocation of NOx emission allowances (an allowance is equal to one ton of NOx emissions in a specified control period). The proposed regulations call for the initial allocation of NOx allowances for a ten-year period, i.e., for the control periods in 2004 through 2013. One of the changes to the proposed regulations mandated by the General Assembly is the reduction of the initial allocation period for EGUs from ten years to five years. Obviously, no comment on this statutorily mandated change is necessary.

The General Assembly did not mandate a change in the initial ten-year allocation period for non-EGUs. The VMA believes the Board should retain the ten-year initial allocation period for nonEGUs. The Advisory Group carefully considered this issue and concluded that ten years provides owners of units with the appropriate planning horizon. Facility owners must have sufficient lead time to adjust complex manufacturing operations to keep steam and power supplied by the regulated units in balance with production demands. As difficult as it may be to do this for electric generating units, it is much more complicated for manufacturing operations that often produce multiple products made from multiple raw materials with different energy demands for sale in ever-changing worldwide markets. Non-EGUs simply must be accorded the maximum opportunity to plan for future business conditions.

In its analysis of the proposed regulations, the Department of Planning and Budget ("DPB") addressed the issue of initial allocations. DPB noted that the most economically efficient ways of allocating NOx allowances would be to auction them or to allocate them permanently. The proposed regulations follow neither of these approaches. DPB then compared the three-year initial allocation period in EPA's

"model" NOx SIP call rule, 40 CFR Part 96, to the ten-year initial allocation period in Virginia's proposed rule. DPB analyzed the issue as follows:

While the [Board's] proposal is not as efficient as one containing a once-and-for-all allocation or an auction, the 10-year window represents a significant improvement in economic efficiency over the three-year window proposed by EPA. . . . The Air Board's technical advisory committee for this regulation proposed a 10-year reallocation horizon. While this is still inefficient relative to a permanent allocation, the longer the allocation horizon, the less inefficiency from uncertainty and from giving firms incentives to change production in response to future free allocations (17 Va. Reg. at 3170-71).

In short, regardless of whatever motivated the General Assembly to reduce the initial allocation period for EGUs, it is clear a ten-year initial allocation period is far more economically efficient than a five-year period for manufacturers (nonEGUs). Accordingly, the VMA urges the Board to retain the ten-year initial allocation period for non-EGUs.

**RESPONSE:** Please see responses to comments #34 and #39.

100. **SUBJECT:** Subsequent allocations for EGUs

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** VMA recommends that the Virginia regulations follow the approach taken by EPA in the federal NOx budget trading regulations. See 40 CFR 97.41. Rather than re-allocate NOx emission allowances to EGUs annually after the initial five-year period, Virginia should re-allocate allowances to EGUs in five-year blocks. Moreover, these block allocations should be made no later than May 1 of the first year of the preceding five-year block. In other words, the allowances for the control periods in 2009 through 2013 should be allocated to EGUs by May 1, 2004, and the allowances for the control periods in 2014 through 2018 should be allocated by May 1, 2009, and so forth.

**RESPONSE:** Please see response to comment #39.

101. **SUBJECT:** Subsequent allocations for nonEGUs

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** For nonEGUs, VMA supports the approach taken in the proposed regulations to re-allocate NOx allowances after the initial ten-year allocation period annually ten years in advance. We believe that annual re-allocations of the allowances

ten years in advance meets the concerns of manufacturers that sufficient time be allowed so they can make efficient business decisions regarding steam and electric power supplies and demands. As DPB noted in its analysis of the proposed regulations, re-allocation of allowances forces companies to "face both high contracting costs and a high degree of residual uncertainty. And the shorter the advance allocation window, the more severe will be the impact of the reallocation rule." 17 *Va. Reg.* at 3171.

If, contrary to VMA's recommendation, the Board opts to reduce the initial allocation period for non-EGUs from ten to five years, then VMA believes re-allocations for the nonEGUs should be made in five-year blocks at least five years in advance as recommended above for EGU re-allocations. In line with DPB's analysis, this would reduce (but not eliminate) the economic inefficiency caused by the reallocation of NOx allowances to Virginia's non-EGU manufacturers.

**RESPONSE**: Please see response to comments #34 and #39.

102. **SUBJECT:** Initial allocations

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

TEXT: The proposed rule lists the existing Virginia EGUs and nonEGUs and allocates numerical NOx allowances to them for the initial allocation period. The units listed in the proposed regulations are the existing "NOx budget units" identified by EPA as subject to the SIP call rule minus those units the DEQ has determined do not really meet the applicability criteria in 40 CFR 96.4 (duplicated in proposed 9 VAC 5-140-40). These EGUs and nonEGUs are the so-called "baseline" units EPA considered in calculating the magnitude of the statewide NOx emissions budgets in Virginia. VMA strongly believes that the initial allocations of NOx allowances must be restricted to only those baseline units EPA considered in calculating the Virginia EGU and nonEGU budgets.

We have heard arguments that NOx allowances should not be considered the "property" of any source owner, but rather should be considered the "property" of the state to dole out in the best interests of its citizens and businesses. This allocation issue is sometimes characterized as a "fairness" issue – that NOx allowances should be distributed "equitably" to all who seek them. This mischaracterizes the approach where allowances are distributed initially only to the baseline units considered in setting the budgets. We believe it is only fair to give the NOx allowances back to the very baseline units that are responsible for their existence in the first place.

Some claim that forcing owners of new (non-baseline) units to acquire NOx allowances from the baseline units is a unfair "barrier to entry" that stifles competition. In its analysis of the proposed regulations, DPB squarely addressed this issue. As DPB

noted: "While buying allowances is a cost of entry, it is not in any significant sense a barrier to entry any more than buying a lease, paper clips, and computers is a barrier to doing business. They are **not** barriers to entry." 17 *Va. Reg.* at 3171 (emphasis in original).

On the so-called "fairness" issue, DPB noted that distributing the initial allocations to the baseline units "does not produce economic inefficiency. . . . If firms entering the market value the allowances at or above the market price, there are firms that will sell them. In this case, both the entering firms and the existing firms face an efficient set of incentives." 17 *Va. Reg.* at 3172. To distribute the initial allocations free to new entrants at the expense of the baseline units would actually be economically inefficient. DPB asks "why imposing increased compliance costs on the public is somehow more fair than requiring new firms to purchase the resources they need to enter a business even though the existing firms don't have to." *Id.* We thoroughly agree with DPB's assessment.

In short, VMA believes it would actually be unfair and economically inefficient to allocate the initial NOx allowances to any units other than the baseline EGU and non-EGU units. Therefore, we urge the Board to retain the approach in the proposed rule and allocate the initial NOx allowances to only the baseline EGUs and non-EGUs EPA included in its calculation of the Virginia NOx budgets.

**RESPONSE**: Support for the proposal is appreciated and this approach has been retained in the proposal.

103. **SUBJECT:** State budget not listed in regulation

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** We believe it is important for certainty's sake to list the baseline units receiving initial allocations in the regulation. However, we do not advocate including the actual numerical allocations in the regulations. As noted above, the D.C. Circuit Court has forced EPA to reconsider the growth factors the agency used in calculating the sizes of the EGU budgets for each state. Thus, EPA may well change the budget for Virginia's EGUs. In the near future, EPA may also adjust the non-EGU budgets, upward or downward, for other reasons. To effectuate these changes in the budgets, the Board would have to undertake a long and laborious rulemaking to change the numerical values included in Virginia's regulations. One way to avoid this is to merely incorporate by reference EPA's numerical budget limit for EGUs by citing in the Virginia regulations the appropriate portion of the Code of Federal Regulations, *i.e.*, 40 CFR 51.121, where EPA sets the state-wide budgets.

With respect to nonEGUs, this approach may pose something of a problem because no where does EPA set a budget for just the baseline units in the non-EGU category.

Thus, the baseline non-EGU budget is not fixed by EPA edict. VMA suggests that no overall "budget" for the baseline nonEGUs need be set forth in the regulations. Instead, the DEQ could determine the total allowable NOx allowances for the collection of baseline units in the Virginia non-EGU category and use this as the "cap" on baseline non-EGU NOx emissions for purposes of allocating the NOx allowances to the baseline units. In any event, VMA believes the Board should not fix the numerical EGU and non-EGU budgets in Virginia's NOx SIP call regulations.

**RESPONSE**: Please see response to comment #1. EPA has made it very clear that no SIP will be approved without specific budgets identified in the SIP submittal. The nonEGU budget was used from CFR Part 97 because it is a budget number that EPA will support and it better reflects the actual emissions from the nonEGU sector.

104. **SUBJECT**: Allocation methodology

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** As noted above, VMA advocates leaving the actual numerical allocations out of the regulations. We favor instead including in the regulations the method that DEQ will use to determine the initial allocations and subsequent reallocations. The actual process of calculating the allocations can be done outside of the regulatory process and implemented through Title V or other permitting of sources with regulated units.

**RESPONSE:** Please see response to comment #41.

105. **SUBJECT**: Allocation methodology; five-year heat input

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

TEXT: VMA advocates the approach taken generally in the proposed regulations, i.e., determining the NOx allowance allocations based on the average heat input for the two highest years of the past five years. However, we note the DEQ did not actually employ this method for the initial allocations. Instead, the DEQ used heat input data, where available, for the four-year period from 1995 through 1998 to calculate the initial EGU and non-EGU allocations. In some cases for nonEGUs, heat input data were unavailable so the DEQ set initial allocations for some nonEGUs based on their past annual NOx emission rates.

The VMA advocates using a full five years of heat input data for calculating the initial allocations. In keeping with our recommendation above to include the allocations

method in the regulation rather than the actual numerical allocation, we recommend that the initial allocation method specify that heat input data from the years 1995 through 1999 be used to set the initial allocations.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

106. **SUBJECT:** Allocations based on heat input

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** During the development of its NOx SIP call for the states, EPA considered arguments that NOx allowance allocations for EGUs should be based on electrical output rather than heat input. In its final NOx SIP call model rules, 40 CFR Part 96, and its own NOx budget trading regulations, 40 CFR Part 97, EPA opted to use heat input rather than electrical output as the basis for calculating allocations. VMA believes Virginia should follow EPA's lead in this regard and retain the heat input approach taken in the proposed regulations.

As noted above, in some cases the DEQ did not have sufficient heat input data to calculate the initial allocations for certain non-EGUs. We believe the non-EGU sources can provide the DEQ with heat input data for all or a sufficient part of the five-year period from 1995 through 1999. Therefore, we advocate basing the initial allocations for nonEGUs exclusively on the basis of heat input data, not emissions data, from 1995 through 1999.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

107. **SUBJECT:** Allocations based on permitted rates

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

TEXT: The proposed regulations call for setting EGU allocations based on the heat input (determined as described above) multiplied by the either 0.15 lbs NOx/mm BTU or the unit's permitted NOx emission limit (expressed as lbs NOx/mm BTU), whichever is lower. 9 VAC 5-140-420.B (proposed). Similarly, the proposed regulations call for setting the non-EGU allocations based on the heat input multiplied by either 0.17 lbs/mm BTU or the unit's permitted NOx emission limit, whichever is lower. 9 VAC 5-140-420.C (proposed). The 0.15 lbs/mm BTU and 0.17 lbs/mm BTU NOx emission rates are sometimes called the "core" emission rates.

The Advisory Group carefully considered whether the initial allocation and subsequent re-allocations for a permitted unit with a NOx emission limit lower than the core emission rate should be based on the higher core emission rate or the lower permitted emission rate. Some have argued that excess allowances should be given to the permitted units with emission limits lower than the core emission rates as a reward for controlling NOx emissions beyond the core emission rates. We do not agree that this windfall should be given to the permitted units as a "reward" for doing what they are legally obligated to do in order to build and operate the units.

The Advisory Group decided it would make little sense to allocate NOx allowances in excess of a unit's allowable NOx emission limit. That unit could not use the NOx allowances, so its owner would merely receive a windfall. Such a windfall would accrue at the expense of units that need allowances because they were not allocated sufficient allowances to operate in their historical fashion without the installation of expensive emission controls or the purchase of allowances, perhaps some of the same allowances that were given as a windfall to the units that could not use them.

VMA agrees with the consensus of the Advisory Group and recommends that the Board retain the approach taken in the proposed regulations. Allocations should be based on the lower of the core NOx emission rate and the unit's permitted NOx emission limit.

**RESPONSE**: Support for the proposal is appreciated.

108. **SUBJECT:** New source set-aside

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

TEXT: The proposed regulations do not provide for any special pool of NOx allowances that would be dedicated to new sources that begin operating in Virginia. Such a separate pool of allowances is commonly referred to as a new source "set-aside." Basically, a set-aside would comprise a pool of NOx allowances that would be taken from the budgets for the baseline EGUs and nonEGUs and reserved for distribution to "new" regulated units that need NOx allowances to operate.

The General Assembly mandated a set-aside program for EGUs. The regulations must be changed to create a set-aside pool of allowances in the first five years of Virginia's NOx budget trading program, *i.e.*, 2004 through 2008, equal to five percent of the total NOx allowances in the EGU budget. Each year after that, the new source set-aside must equal two percent of the EGU budget. In the following comments, we respond to the DEQ's request for public comments on several aspects of the set-aside concept.

There should be no set-aside for non-EGUs.

One of the major questions the DEQ raised in the preamble to the proposed regulations

is whether there should be a new source setaside for nonEGUs. The VMA believes there should be no such set-aside. Simply put, we do not believe new source set-asides are fair or economically efficient.

We do not think it is fair to take NOx allowances away from the baseline units that are responsible for their very existence and give them as a windfall to new (non-baseline) units. More importantly, we doubt that taking NOx allowances from the existing baseline units and giving them new units would be economically efficient for the citizens and businesses of the Commonwealth.

The DPB addressed set-asides in a detailed analysis included in the preamble to the proposed regulations. The DPB concluded, in no uncertain terms, that Virginia's NOx SIP call regulations should not include new source set-asides. As DPB explained: "This set-aside is equivalent to a cash subsidy for firms bringing new NOx sources on line; paid for by a tax on the owners and users of existing sources. A set-aside program such as this would do substantial violence to the operation of the market." 17 *Va. Reg.* at 3173. DPB also noted that "unless the sources receiving the set-aside pay for the use of the set-aside allowances [which is not the approach advocated by set-aside proponents], then there will be an efficiency cost arising from the set-aside provisions." *Id.* at 3176.

The DPB also addressed the argument raised by some that a new source set-aside would encourage competition in electric generation. DPB concluded:

[T]he set-aside will not increase the number of efficient firms who enter since those firms would enter anyway. Only inefficient firms would base their entry decision on whether they receive a grant of free allowances. Consequently, a set-aside rule will increase the average cost of electricity generated in Virginia. . . . It [a set-aside] is an extremely inefficient way to encourage new generation facilities (17 *Va. Reg.* at 3176).

While a new source set-aside is a highly questionable method of encouraging competition in the electric generating sector, it is unquestionably without merit as a method of encouraging new manufacturers to locate in Virginia. Virginia's manufacturing sector is extremely diverse and responsive to a myriad of factors that determine competitiveness in the global marketplace. It is very unlikely that any owner would choose to locate a new manufacturing facility in the Commonwealth because the new source gets some free NOx emission allowances. There are simply too many other factors in making such a decision that are far more important to manufacturers than a few free NOx emission allowances.

In short, the VMA believes the Board should retain the approach taken in the proposed regulations. No allowances should be taken from existing (baseline) nonEGUs and dedicated as a set-aside for new (non-baseline) nonEGUs that come into Virginia.

**RESPONSE:** Please see responses to comments #34 and #37.

#### 109. **SUBJECT:** nonEGU set-aside

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** If the Board rejects VMA's recommendation and changes the proposed regulations to includes a new source set-aside for nonEGUs, the Board should limit the size of the set-aside. The new source set-aside for the initial allocation period should be no more than 5% of the total allowances in the non-EGU budget. The set-aside for control periods after the initial allocation period should be no more than 2% of the total allowances in the non-EGU budget. This would be in keeping with the set-asides mandated by the General Assembly for electric generating units subject to the regulations.

**RESPONSE**: Please see response to comment #36.

110. **SUBJECT:** Where should the set-asides come from?

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** If the Board changes the proposed regulations to include a set-aside for new nonEGUs, the NOx emission allowances for the set-aside should come only from the non-EGU budget. Correspondingly, the allowances for the EGU set-aside mandated by the General Assembly should come only from the EGU budget. The penalty of the set-aside for each sector, electric generation and manufacturing, should be borne only by the owners of units in their respective sector. Owners of nonEGUs should not have to bear the penalty of forfeiting NOx allowances to fund the new source set-aside for EGUs, and vice versa.

**RESPONSE:** Please see response to comment #36.

111. **SUBJECT:** Unused set-aside returned to existing sources

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT**: Any unused set-aside allowances should be returned to the budget from which they were taken for redistribution back to budget units on a pro rata basis.

Some have suggested that unused set-aside allowances that are not distributed to new

sources should be "dedicated to the environment." This essentially means that unused set-aside allowances would be confiscated and "retired." The VMA believes unused set-aside allowances should not be confiscated, but rather should be returned to the budget for redistribution back to the budget units on a pro rata basis. This is the approach the EPA takes in the federal NOx budget trading regulations. See 40 CFR 97.42(f).

EPA maintains the drastic NOx emission reductions mandated by SIP call regulations will result in large reductions in ozone concentrations throughout Virginia and the entire northeast. This significant improvement in air quality comes at considerable expense, however. Owners of sources subject to the SIP call rules must make large cuts in NOx emissions for the betterment of the environment. If more cuts were necessary to achieve the air quality goal, EPA would have mandated more. It makes no sense for Virginia to force owners of regulated units to make even more costly cuts in NOx emissions. Therefore, the VMA strongly supports the approach where unused set-aside allowances are returned to the budget from which they were taken for redistribution back to budget units on a pro rata basis.

**RESPONSE**: Please see response to comment #37.

112. **SUBJECT:** Definition of "new source"

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

TEXT: Set-aside allowances should be distributed to "new" units in operation at the beginning of the allocation period. The DEQ solicited public input on the issue of what constitutes a "new" unit eligible for an allocation of NOx emissions allowances from the new source set-aside. The VMA advocates the approach taken by EPA in the federal NOx budget trading regulations. "New" sources eligible for an allocation from the set-aside during the initial allocation period are those units that commence operation, or are projected to commence operation, on or after May 1, 1997. 40 CFR 97.42(d). To receive an allocation the new unit must actually be in operation as of the beginning of the control period (May 1) for which the set-aside allocation was made. If the source fails to meet this test, any set-aside allowances allocated to the unit would be forfeited and returned to the budget for redistribution back to the baseline units.

**RESPONSE:** Please see response to comment #38.

113. **SUBJECT:** Local impacts due to trading

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** We are aware that some advocate that the regulations establish a requirement and procedure for DEQ to approve any trades of NOx emission allowances. Proponents of this requirement say it is necessary to prevent trading of emission allowances that would exacerbate localized ozone nonattainment or create ozone "hot spots," e.g., in the northern Virginia metropolitan Washington, D.C., area. In reality, the trading of emission allowances under the proposed rules would have no such effect.

The EPA's scheme for regional NOx reductions under the SIP call relies on the regional trading of NOx emissions allowances. It is essential that this open trading feature be preserved in Virginia's proposed SIP call rules. EPA has said repeatedly that if States implemented the regional NOx SIP call reductions, no further cuts in NOx emissions would needed. According to EPA, this is because of the regional nature of the problem. Ozone in the Washington, D.C. metropolitan area is due in large extent to the regional transport of ozone and the ozone precursor, NOx. One source in the region is not going to create an ozone "hot spot."

Nor will trading NOx emission allowances exacerbate ozone nonattainment downwind. Trading does not increase NOx emissions, so trading will not exacerbate ozone nonattainment. Moreover, the effect of the entire NOx SIP call program will be a substantial decrease in NOx emissions, and hence ambient ozone concentrations, everywhere throughout the region.

The VMA strongly advises the DEQ and the Board to allow the proposed regulations to work as designed and intended. If real data show that regional trading of NOx emission allowances does, somehow, have a localized effect, then the regulations could be amended as needed. However, we believe this will prove unnecessary. In short, there is no reason to alter the current approach to trading in the Board's proposed regulations.

**RESPONSE**: Support for the proposal is appreciated.

114. **SUBJECT**: Support for the program

<u>COMMENTER</u>: Cathy C. Taylor, Vice President, Environmental Affairs and Communications, Virginia Manufacturers Association, P.O. Box 412, Richmond, VA 23218-0412

**TEXT:** The VMA generally supports the Board's proposed NOx Budget Trading Program regulations. However, we believe the proposed regulations could be improved by making the few changes we advocate in the foregoing comments.

**RESPONSE:** Support for the proposal is appreciated.

115. **SUBJECT**: Support of legislative changes

<u>COMMENTER</u>: Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** Following are the comments of Reliant Energy to the referenced proposed regulations. Reliant Energy is a national generator of electricity and is committed to the development of clean, new and highly efficient electric generating facilities. Consequently, we strongly support the 2001 Acts of Assembly amendment to Chapter 580 §10.1-1322.3. We believe the amendment is a necessary change to allow development of the Virginia competitive electric generating market. However, to achieve the goals of the amendment, it is necessary to focus on the detailed changes to the proposed regulation. To simply provide for a new source set-aside does not assure fair and equitable entry into the market. The specific implementing regulations will either allow or prevent that from occurring.

**RESPONSE**: Changes have been made to the proposal as required by legislation.

116. **SUBJECT**: New source set-aside

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** Importantly, the new source set-aside should only be used to provide a "new" source an allowance allocation for the initial period of operations during which the "new" source establishes an operations baseline. Upon development of the operations baseline, the "new" source should now become an "existing" source and, as such, be allocated allowances in exactly the same fashion as other existing sources. It is also important to minimize the time period required for a "new" source to establish the operations baseline necessary to become an "existing" source. This operations baseline period can be as short as one full ozone season.

**RESPONSE**: Please see response to comment #39.

117. **SUBJECT**: Allocation based on permit limit

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** The proposed regulations provide for allocation calculations at 0.15 lbs NO2/mmBtu or the permitted emission rate, whichever is less. While presented as the most reasonable approach, Reliant Energy believes this is a misguided concept. The proposed allocation calculation methodology is a continuation of environmental regulations which serve as a disincentive to the development of new generation. To allocate allowances in this fashion encourages the installation of control technology over the development of new generation. This is due to the ability to install

control technology on older, higher emitting units creating the opportunity to accumulate appreciable numbers of unused allowances. That opportunity is virtually non-existent for new, clean electric generating facilities. Those "new" sources will have permit limits which preclude additional reductions that would result in unused, marketable allowances. Consequently, all sources with an operations baseline should be allocated at an emission rate of 0.15 lbs NOx/mmBtu.

The greatest value of consistent allocation to all "existing" electric generators is the opportunity for those "existing" generators to invest in new, clean generation as well as pollution controls. The development of new, highly efficient, clean electric generating projects would provide unused allowances for the existing generation, the same as pollution control projects, while at the same time expanding their generating capacity. This, in essence, results in greater value for the expenditure of those monies.

Further, the consistent allocation to all sources which have an operations baseline insures a robust market for allowances as the cleanest and most efficient generators will have unused allowances to bring to market. This will ultimately result in the lowest cost for an allowance because, quite simply, the least expensive cost of control would be the development of new generation.

**RESPONSE**: The intent of pollution regulations has always been to reduce pollution by requiring newer facilities to use best available control technology (BACT) while mandating that older facilities clean up. The intent of this program is no different, except that it harnesses the marketplace to provide the least cost to pollution control. There is now an incentive to clean up: a credit or an allowance that can be sold, banked or traded. To award allowances to new facilities because they are just doing what is already required by law and regulation is not fair or appropriate. To use the marketplace to encourage older facilities to clean up in the least expensive way possible is appropriate.

No changes have been made to the proposal based on this comment.

118. **SUBJECT:** Simplified regulatory system for both EGUS and nonEGUs

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** It is most efficient to have all affected units allocated on the same timeframe. To differentiate between the two categories will only lead to confusing regulations.

**RESPONSE:** Please see response to comment #34.

119. **SUBJECT:** Size of new source set-aside

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant

Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** A new source set-aside should be established for all new affected units. We also recommend that the new source set-aside not be reduced to 2%. Instead, provide for a continuous 5% set-aside with unused allowances from the annual set-aside being returned to the existing sources

**RESPONSE**: Size of the new source set-aside is established by law and there is no authority to modify that law by regulation.

No changes have been made to the proposal based on this comment.

120. **SUBJECT**: Establish only one set-aside

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** The budgets should not be differentiated. There should be one budget, including all affected units. All new units would apply for the same set-aside reserve. To have separate budgets, etc. only confuses the regulation's implementation and operation of the program.

**RESPONSE**: Please see response to comment #36.

121. **SUBJECT:** Distribution of the set-aside

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** If oversubscribed, the new source set-aside should be distributed pro-rata based upon permitted emission rate. Otherwise, all new affected units should be allocated their full request. The allocations should be available contingent upon actual operation and adjusted if start up occurs during the ozone season (May 1 – September 30).

**RESPONSE:** Please see response to comment #37.

122. **SUBJECT:** Definition of "new source"

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** "New" affected units which have not previously operated and consequently do not have an operation baseline should be eligible for new source setaside allocations. This allocation should be contingent upon the operation of the "new source" during the subsequent ozone season.

**RESPONSE**: Please see response to comment #38.

123. **SUBJECT:** Allocation methodology

<u>COMMENTER</u>: Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** The allocation from the new source set-aside should be requested annually. However, the allocation period for "existing" (all sources with an operations baseline) units should be a five year period.

**RESPONSE**: Please see response to comments #37 and #39.

124. **SUBJECT**: State Budget

<u>COMMENTER</u>: Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT**: Reliant Energy agrees with this proposal. As the values are not finalized, this allows the regulatory process to move ahead.

**RESPONSE**: Support for the proposal is appreciated.

125. **SUBJECT:** Should the allocations be listed in the regulation

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** The regulations should include the formulas and methodology to calculate the allocations with subsequent notification of the number of allowances allocated.

**RESPONSE**: Please see response to comment #41.

126. **SUBJECT:** Use of other state's regulation

<u>COMMENTER</u>: Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** We strongly urge the Virginia Department of Environmental Quality to review the attached Pennsylvania regulations. 25 Pa. Code Chapter 145 is built from 40 CFR Part 97, however, it incorporates important changes which greatly improve the regulations. We encourage the adoption of regulations consistent with 25 Pa. Code Chapter 145. These regulations were developed with a great deal of input from the Pennsylvania Air Quality Technical Advisory Committee (AQTAC). AQTAC is

a diverse citizen's advisory group which holds public meetings for open dialogue and ultimately provides recommendations to the Pennsylvania Department of Environmental Protection on the control of regulations. The individual at the Pennsylvania Department of Environmental Protection that should be contacted if there are any questions on these Pennsylvania regulations is Dean Van Orden, Chief, Stationary Source Section, Division of Air Resource Management. He can be reached at 717-787-1455. For the reasons stated above in 3.), we again strongly urge the Virginia Department of Environmental Quality to review the attached Pennsylvania regulations.

**RESPONSE**: 40 CFR part 97 was reviewed and those provisions found to be useful were incorporated into the state regulation. This is more efficient than trying to review a regulation from another state with which we are not familiar.

No changes have been made to the proposal based on this comment.

127. **SUBJECT:** EGU and nonEGU requirements

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** The regulations should not differentiate between source categories. This is confusing and makes the regulatory process more difficult.

**RESPONSE**: Please see response to comment #34.

128. **SUBJECT**: Additional review of regulation

**COMMENTER:** Vincent J. Brisini, Environmental Manager, Reliant Energy, 1001 Broad Street, P. O. Box 1050 Johnstown, PA 15907-1050.

**TEXT:** Finally, give the importance of the detailed regulations implementing the new source set-aside and because they have yet to be developed, Reliant Energy requests that the Department provide a brief opportunity for interested parties to review and comment on a draft of the regulations before they are finalized.

**RESPONSE:** The State Implementation Plan (SIP) process requires the Commonwealth to submit a final regulation within 18 months of notification of a deficiency in the state's plan. Virginia was notified of such a deficiency in December of 2000 and has until June of 2002 to submit a final regulation and SIP demonstration. The consequences of not submitting a complete, final regulation are federal sanctions. Because of the tight timeframe, the request for additional review is not possible.

No changes have been made to the proposal based on this comment.

129. **SUBJECT**: Output-based program

**COMMENTER:** Mark V. Carney, Vice President Environmental Affairs, PG&E National Energy Group, 7500 Old Georgetown Road, Bethesda, MD 20814-6161

TEXT: PG&E NEG strongly supports an integrated, national emissions reduction program that sets uniform output-based portfolio standards for multiple pollutants for the electric industry. Only an integrated, output-based program can lead to environmental comparability between states, the development of consistent economic policies between states that encourage efficiency and employ market-based strategies to achieve compliance. PG&E NEG supports a regulatory agenda that removes disparities between states and balances the fragile environmental interests of all states. In fact, PG&E NEG is committed to working with other stakeholders to develop a workable set of regulations at the state level.

**RESPONSE**: Please see response to comment #75.

130. **SUBJECT:** The Role of New Sources in Emission Trading and Electricity Markets

**COMMENTER:** Mark V. Carney, Vice President Environmental Affairs, PG&E National Energy Group, 7500 Old Georgetown Road, Bethesda, MD 20814-6161

TEXT: EPA's model NOx implementation rule departed from the past practice—as embodied in Title IV of the 1990 Clean Air Act Amendments—of distributing all emission allowances to existing sources as a free and perpetual endowment. When the 1990 amendments were enacted, the power sector was in the very early stages of the transformation that it now finds itself in the midst of. At that time it made sense to give existing sources all allowances because competition did not yet exist in any substantial way and capacity was not being increased significantly.

The world in 2001 is very different from what it was in 1990. Competition is growing rapidly in electric markets across the country, and dramatically changing the way power is generated and provided. Even in states such as Virginia, which will soon begin transitioning to retail electricity competition, wholesale competition and increasing electricity demand are driving significant new investment in power generating capacity. In Virginia alone, at least 2,650 MW of new capacity has been announced for development, most of it by competitive companies like PG&E NEG that will be subject to market-based rates. This trend is strong in neighboring states as well, and is only expected to increase in Virginia as a strong economy fuels continued electricity demand growth.

We commend the Department of Environmental Quality (DEQ) for using the EPA model rule as a starting point for its rule development. The EPA model rule may not be perfect; however, it does manage to strike a reasonable balance between many complex and competing interests.

**RESPONSE**: Support for the proposal is appreciated.

131. **SUBJECT:** New source set aside

**COMMENTER:** Mark V. Carney, Vice President Environmental Affairs, PG&E National Energy Group, 7500 Old Georgetown Road, Bethesda, MD 20814-6161

**TEXT:** In its model rule, EPA recognized that using the traditional allocation model in the SIP call would be inappropriate in the new electricity market context. Using the old model would create a competitive advantage for existing sources and disadvantage new market entrants. This would discourage the utilization of advanced generating technologies with superior efficiencies and environmental performance, which would provide many of the air quality benefits that EPA's SIP Call seeks to encourage.

The new source set-aside, in which a modest portion of a state's total budget is reserved for new sources, was EPA's solution to this problem. It provided for new growth by setting aside five percent of the initial state budget allocation and two percent of the allocation annually thereafter for new sources. Many states with different levels of electricity competition have adopted new-source set asides in light of their environmental, economic and electricity reliability benefits.

While Virginia's proposed rule does not include a new source set-aside, PG&E NEG understands that recently enacted changes to the rule's authorizing legislation (§10.1-1322.3) specify that the state's NOx rule must provide a set-aside using the levels in EPA's model rule. We support this change, as well as the DEQ's efforts to incorporate the set-aside in its final rule. Accordingly, PG&E NEG is pleased to respond to several set-aside issues on which the DEQ has solicited comments.

**RESPONSE**: Please see response to comments #36 and #37.

132. **SUBJECT:** Transition of new sources to existing sources

<u>COMMENTER</u>: Mark V. Carney, Vice President Environmental Affairs, PG&E National Energy Group, 7500 Old Georgetown Road, Bethesda, MD 20814-6161

**TEXT:** The incorporation of new sources into the existing source pool for allocation purposes will be a key aspect of the DEQ's rule revisions to address the legislature's set-aside mandate. This is because, if new sources are left to perpetually draw from the new source set-aside, the set-aside allowances will be insufficient to meet the demand of truly new sources as they come online. If this were to occur, four-and five-year old plants would continue to consume set-aside allowances and increase demand for any set-aside allowances that might otherwise be available for new sources.

EPA is sensitive to this issue, and in its review of states' NOx implementation rules is examining the way in which sources' allocations are transitioned from the set-aside to the existing-source budget. PG&E NEG urges the DEQ to incorporate new sources into the existing-source allocation pool as soon as possible after their first complete year of operation—ideally in the next compliance period following that of their first allocation. Such an approach would help to ensure that set-aside allowances may be available to support new growth.

Incorporating aging "new" sources into the existing-source allocation would significantly increase the planning certainty for new sources and reduce demand for the new-growth allocation pool by sources that are no longer new. This is consistent with EPA's intended use for the set-aside in its model rule, as well as EPA's criteria for approving state's NOx implementation plans.

**RESPONSE**: Please see response to comment #39.

133. **SUBJECT:** Formula for Calculating Allocations

<u>COMMENTER</u>: Mark V. Carney, Vice President Environmental Affairs, PG&E National Energy Group, 7500 Old Georgetown Road, Bethesda, MD 20814-6161

TEXT: The proposed rule allocates allowances to EGUs by multiplying 0.15/mmBtu by the lesser of the emission rate or the permit limit. PG&E NEG has serious concerns about this approach, as it reduces the number of allowances allocated to cleaner units, effectively denying them the market value of their significant investments in low-emitting advanced generating technologies. This conflicts with the legislature's recent changes to the rule's authorizing law (§10.1-1322.3), which states "The regulations applicable to the electric power industry shall foster competition in the electric power industry, encourage construction of clean, new generating facilities and provide new source set-asides..."

As the very purpose of Virginia's NOx trading program will be to provide market-based incentives for clean, new generating facilities, it should not provide competitive disadvantages in the form of reduced allowances to units that have invested in such technologies. Clearly, such allocations disadvantage those units that provide the environmental benefits that the NOx program seeks to serve, and circumvent the premise of the program as a market for environmental improvements.

PG&E NEG urges the DEQ to reconsider this approach, and instead adopt a rule that gives equal footing to all sources at .15 lb/mmBtu, rather than the lower of that and the permitted rate. Otherwise, the current approach would simply prescribe through regulation the value of emission reductions that the market itself should determine—hampering the market's ability to find the most efficient and cost-effective emission reductions.

**RESPONSE:** New sources are required by current regulation to install

BACT regardless of whether this NOx trading program is established or not. The cost of BACT is already factored into the capital costs of the new facility. The state budget for allocations is based on a 60 percent reduction of the existing source inventory, meaning that these sources must undergo significant reductions to meet the new emissions rate. To allocate to new sources based on the control rate of existing sources is not appropriate as it provides a "windfall" to new sources that are just doing what is currently required. Please see response to comment # 43.

No changes have been made to the proposal based on this comment.

134. **SUBJECT:** Input- vs. Output-Based Allocations

<u>COMMENTER</u>: Mark V. Carney, Vice President Environmental Affairs, PG&E National Energy Group, 7500 Old Georgetown Road, Bethesda, MD 20814-6161

**TEXT:** PG&E NEG understands that the DEQ favors the apparent fairness and equity of using the same heat-input basis for allocations for all sources. However, PG&E NEG believes that output-based standards are not only the most fair and efficient method of allocation, as explained below—but that output-based standards are also more supportive of environmental quality goals. We strongly encourage the DEQ to reconsider whether an output-based approach would better serve this program.

Using input-based standards, the current proposal effectively rewards inefficiency by allocating allowances on the basis of historical heat input. Under this approach, an inefficient generator effectively receives a greater allocation than an efficient one. In contrast, with output-based systems, allowances are allocated on the basis of energy generated and not BTUs consumed. As a result, each kilowatt-hour delivered to the grid receives the same allocation, irrespective of the efficiency with which it was generated. A number of other states are using output based allocation methods, at a rate of 1.5 lbs. NOx per megawatt-hour (1000 kilowatt-hours) generated. The output-based method, we believe, yields the fairest results of any allocation scheme and creates incentives that are appropriate both economically and environmentally.

#### Recommendations

For these reasons, PG&E NEG urges the DEQ to revise certain aspects of its proposed rule that relate to allowance allocations, including:

- 1. Reclassify new sources as existing sources for purposes of the rule (and allocations) in the compliance period following that in which they commenced operations. If this is not practical, reclassify new sources as soon as possible for allocation purposes.
- 2. Consider the value of an output-based allocation methodology for use from the outset of the program.

**RESPONSE**: Please see response to comment #75.

## 135. **SUBJECT**: Budget provisions

<u>COMMENTER</u>: Mark V. Carney, Vice President Environmental Affairs, PG&E National Energy Group, 7500 Old Georgetown Road, Bethesda, MD 20814-6161

TEXT: The DEQ has requested comments on whether its final rule should (1) incorporate Virginia's emission budget by reference or (2) specify the budget, including specific allocations on a unit-by-unit basis. The question arises because any changes to Virginia's budget or allocations (including by EPA) that occur following adoption of the final rule would necessitate reopening the regulatory process. PG&E NEG appreciates the DEQ's concerns and agrees that it would be prudent to incorporate these data by reference rather than risk reopening the regulatory process in the case that changes are made. In fact, a court decision earlier this year has already forced EPA to rework some of the growth factors on which the budgets are based—illustrating the risks of concern to the DEQ. Accordingly, PG&E NEG urges the DEQ to list the affected sources and units in its final rule and simply incorporate the EPA budget by reference.

#### Recommendation:

1. Specify the affected sources and units in the final rule and simply incorporate the EPA budget by reference, to avoid the risk of reopening the rulemaking process in the case of budget revisions.

**RESPONSE**: Please see response to comment #39.

136. **SUBJECT:** Shorter initial allocation period

<u>COMMENTER</u>: Chris Broemmelsiek, Vice President, Development, Competitive Power Ventures, Inc., Silver Spring Metro Plaza II, 8403 Colesville Road, suite 915, Silver Spring, MD 20910

**TEXT:** CPV focuses on markets that need new, efficient, clean generation. In the Commonwealth of Virginia, CPV is developing three facilities: CPV Warren in Warren County, a \$280 million 520 megawatt combined cycle generator; CPV Smyth in Smyth County, a \$400 million 780 megawatt combined cycle generator; and CPV Cunningham Creek in Fluvanna County, a \$280 million 520 megawatt combined cycle generator.

CPV is pleased to learn that the rules will be revised to reduce the initial allocation period from ten to five years, and to provide a new source set-aside budget. Each of these changes will expedite our full participation in the trading program. Reducing the initial allocation period will allow us to be fully assimilated into the program in a more timely fashion. Providing allocations from the new source set-aside

budget until we begin receiving allowances as an existing facility will allow us entrance into the trading market during the first full control period in which we operate.

**RESPONSE:** The changes are mandated by law, therefore, the proposal has been changed to comply with the law. Support for the proposal is appreciated.

# 137. **SUBJECT:** Distribution of set aside

<u>COMMENTER</u>: Chris Broemmelsiek, Vice President, Development, Competitive Power Ventures, Inc., Silver Spring Metro Plaza II, 8403 Colesville Road, suite 915, Silver Spring, MD 20910

**TEXT**: In response to your request for comments on how the set-aside budget should be disbursed, we disagree with the Department's inclination to recommend that the proposed regulation be amended to incorporate the methodology in 40 CFR Part 97 to distribute the new source set-aside. We recommend that the allocations be made on a pro rata basis to all eligible units, not on a first come first served basis. Specifically, we suggest that eligible units be defined as those units that have begun commercial operations, but are not included in the allocations made to existing units. Owners/operators of these units must apply to the Department for allocations from the new source set-aside budget at least thirty days before the Department must report statewide allocations to the Administrator. In the application, the owner/operator must state the number and size (e.g. design heat input) of new units and document the date that they began commercial operation. After determining eligibility, the Department would sum the heat input for the eligible units and make individual allocations equal to the total number of tons in the budget times the percent of the total heat input represented by the unit in question <sup>1</sup>. Once allocated, the allowances from the new source set-aside budget should be treated equally with the allowances from the existing source budget. That is they may be used, sold or banked as provided in the regulations.

(1 While we believe that is unlikely that this method would yield an allocation in excess of the 0.15 lb/mmbtu rate afforded to the existing units, the Department may want to add the phrase "up to 0.15lb/mmBtu times the maximum design heat input times the number of hours in the control period" to assure that such an "excess" allocation does not occur.)

**RESPONSE**: Please see response to comment #37.

138. **SUBJECT:** Allocation of new source set aside

<u>COMMENTER</u>: Chris Broemmelsiek, Vice President, Development, Competitive Power Ventures, Inc., Silver Spring Metro Plaza II, 8403 Colesville Road, suite 915, Silver Spring, MD 20910

**TEXT**: The new source set-aside budget should be allocated annually,

with each eligible unit receiving an allocation from the new source set-aside budget until it has allowances to use from the existing source budget. Since the initial allocation period is five years, units such as ours would receive allowances from the new source set-aside budget based on design heat input for each of the five years in the initial allocation period. Then the allowances from the existing source budget would be allocated based on our historic heat input would be available for use. Similarly, since allocations from the existing source budget are made five years in advance, units that enter the trading program in 2005 or later would also receive allocations from the new source set-aside for five years before the allowances allocated to them from the existing source budget are available for use.

**RESPONSE:** Please see response to comment #37.

139. **SUBJECT**: Heat input data

<u>COMMENTER</u>: Chris Broemmelsiek, Vice President, Development, Competitive Power Ventures, Inc., Silver Spring Metro Plaza II, 8403 Colesville Road, suite 915, Silver Spring, MD 20910

**TEXT:** We recognize that the first year of allocations from the existing source budget would have to be based on just one control period of historic heat input data; however we note that the regulations already account for this situation by stating that the "owner shall not be required to average a zero balance to determine the average" of the two highest control periods (9 VAC 5-140-420A2).

**RESPONSE**: Support for the proposal is appreciated.

140. **SUBJECT:** Annual allocations

<u>COMMENTER</u>: Chris Broemmelsiek, Vice President, Development, Competitive Power Ventures, Inc., Silver Spring Metro Plaza II, 8403 Colesville Road, suite 915, Silver Spring, MD 20910

**TEXT:** We agree with the Department's approach in the proposed regulations to make allocations annually, following the initial allocation period. Although having a different number of allowances every year may make planning difficult, each recipient would know five years in advance how many allowances they have been allocated for the control period. Additionally, the annual volatility of the allocation is sufficiently dampened by the use of the average of the two highest of the last five years of heat input data to determine the number of allowances.

**RESPONSE:** Please see response to comment #39.

141. **SUBJECT**: Definition of "unit's permitted NOx limit"

<u>COMMENTER</u>: Chris Broemmelsiek, Vice President, Development, Competitive Power Ventures, Inc., Silver Spring Metro Plaza II, 8403 Colesville Road, suite 915, Silver Spring, MD 20910

**TEXT:** In the proposed rule, allocations are made at the rate of "an amount equaling 0.15 lb/mmBtu or the unit's permitted NOX limit (expressed as lb/mmBtu), whichever is less" (9 VAC 5-140-420 B1). We anticipate having two permitted NOx limits, one for each of the two fuels we plan to fire. The rule should be revised to specify "the least stringent of the unit's permitted NOx limits". Using the least stringent is appropriate in this case because the 0.15 lb/mmBtu rate is present as a ceiling to assure that units with higher permitted limits are not allocated at a higher rate than the base rate.

**RESPONSE:** Please see response to comment #44.

142. **SUBJECT:** Set aside for new sources only

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** As a prefacing comment, VIPP notes that the Virginia General Assembly has recently amended the statute governing the regulations being considered. In unambiguous language, the statute now provides that new sources share a set-aside of five percent. Insofar as VIPP understands that other commenters have made various suggestions that, if implemented, would permit some share of the five percent set-aside for new sources to be used by existing EGUs and not new sources, VIPP strongly recommends that all such suggestions be rejected summarily, as inconsistent with law.

**RESPONSE**: It is unclear as to what the commenter is saying. Is the comment that the new source set aside be carried over to the next year if not used or is the comment that, if some of the set aside is left over after all new source allocations have been made that the remainder of the set aside should be distributed via pro rata basis only to the new sources and not back to the existing sources from which the set aside came?

The law stipulates that the set aside be created, it does not stipulate how the set aside should be distributed. New sources shall receive allocations based on their maximum design heat input. Just because new development is such that not all of the set aside is used for any given year shouldn't result in the one or two new sources that become operational in a given year receive the entire set aside, whether they need it or not.

The program has been structured to ensure the appropriate distribution of allocations based on specific factors, previous heat input and emissions rate. Once the appropriate allocations are made for new sources meeting the criteria in any given

year, the remainder of the set aside, if any is left, will be distributed on a pro rata basis to the existing source category that created the set aside in the first place. Please see response to comment #37.

No changes have been made to the proposal based on this comment.

143. **SUBJECT:** Simplified regulatory system for both EGUs and nonEGUs

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** We do not believe that the EGUs and nonEGUs need to be subject to the same allocation timeframes. The law only specifies an initial allocation period for EGUs; the length of the initial allocation period for non-EGUs should be made by the Board in consultation with the affected non-EGU units.

**RESPONSE:** Please see response to comment #34.

144. **SUBJECT:** New source set aside for nonEGU sources

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** This issue does not affect our membership. We believe that the decision should be made by the Board in consultation with the affected non-EGU units.

**RESPONSE**: Please see response to comment #35.

145. **SUBJECT:** Where should the EGU new source set aside come from?

<u>COMMENTER</u>: August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

<u>TEXT</u>: The set-aside should be taken from that portion of the entire state budget that was not allocated in the draft rule. Specifically, 1420 tons of the non-EGU budget were not allocated. These unallocated allowances should be used first to fund the new source set-aside. The remainder could be used to increase the budget for the existing EGUs so that allocations, when reduced to meet the EPA EGU budget, would be closer to the originally intended rate of 0.15 lb/mmBtu.

**RESPONSE:** Please see response to comment #36.

146. **SUBJECT:** Distribution of new source set aside

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

TEXT: The set-aside should be distributed annually on a pro rata basis to all new generating units that demonstrate that they qualify for an allocation from the new source set-aside budget and request an allocation at least 30 days prior to the date that the DEQ must submit the NOx allowance allocations to the Administrator. For the first allocation period, this would mean any unit that is not listed in the table in 9 VAC 5-140-940, but has begun commercial operation on or before March 1, 2004. Requests received after March 1, 2004 would be included in the allocation of the set-aside for the following year. Since the initial allocation period for existing EGUs is five years, a "new" unit would continue to receive an allocation annually from the new source set-aside for each of the five years of the initial allocation period, then the unit would be considered an existing unit and receive its allocation from the existing EGU budget. Although the new unit would receive an allocation from the new source set-aside for each of the five years in the initial allocation period, the allocation itself would have to be recalculated every year to consider the addition and deletion of other units in the "new unit" category.

We recommend basing the distribution of the new source set-aside budget on the maximum design heat input of the unit since the new units do not have historic heat input on which to base the allocation. That is, DEQ would total the maximum design heat input of each of the units that requested an allocation, and distribute the allowances in proportion to the individual unit's heat input as a percentage of the total. This method of allocating allowances from the new source set-aside budget should be used for allocations made both during the initial five-year period (when the new source set aside is 5% of the existing EGU budget) and in subsequent periods (when the new source set-aside budget is reduced to 2% of the existing EGU budget).

As with the existing units, if the new unit does not use all of its allocated allowances, the remaining allowances could be banked or sold.

**RESPONSE**: Please see response to comment #37.

147. **SUBJECT:** Definition of "New generating facilities"

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** The term "new generating facilities" should apply to each new generating unit that has begun commercial operation, but does not receive an allocation as from the existing EGU budget. For the initial five-year allocation period, this would mean any unit that has begun commercial operation on or before March 1, 2004 but is not listed in the table in 9 VAC 5-140-940. Allocations should be available to all units

that demonstrate that they meet the definition of "new generating facilities" and request an allocation at least 30 days prior to the date that the DEQ must submit the NOx allowance allocations to the Administrator.

**RESPONSE**: Please see response to comment #38.

148. **SUBJECT:** Initial Allocations Schedule

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** For the first allocation period, this would mean on or before March 1, 2004. Requests received after March 1, 2004 would be included in the allocation of the set-aside for the following year.

We recommend that each new unit receive an allocation annually from the new source set-aside budget until it begins receiving an annual allocation from the existing EGU budget.

**RESPONSE:** Please see response to comments #37 and #38.

149. **SUBJECT:** Subsequent allocations

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

<u>TEXT</u>: Following the initial five-year allocation period, allocations should be made on an annual basis, for the control period five years in the future. For example, the first allocation (following the initial allocation period) would be made April 1, 2004 for the 2009 control period. This allocation would be based on historic heat input for the 1999-2003 control periods. Units with at least two control periods of historic heat input data would be included in the allocation of the existing EGU budget.

**RESPONSE:** Please see response to comment #39.

150. **SUBJECT**: State budget

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** In response to the Department's request for comment on how to redraft the proposed regulation to address the EPA comments in combination with the court decision, we agree with the Department's inclination that the budget should be

lowered to meet the EPA budget. While we believe that the Department's proposed budget more accurately reflects the actual emissions generated in Virginia during the years designated for the inventory development, and we support the Department in its efforts to correct the EPA inventory, we do not want to jeopardize the approvability of the proposed rule and encounter the sanctions proposed by the EPA.

**RESPONSE**: Please see response to comment #1.

151. **SUBJECT**: Specific unit allocation

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** We also agree that the rule should be revised to accommodate the possibility that the budget may be revised in response to the court remand. However, instead of removing the initial allocations from the rule entirely, we recommend that the allocations be presented in the table in 9 VAC 5-140-940 as a percentage of the final budget instead of in tons of NOx.

**RESPONSE:** Please see response to comment #41.

152. **SUBJECT:** Heat input data

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** In addition to responding to the requests for comments on specific issues, we also submit two comments on the proposed allocation methodology. First, we recommend that the percentages in the table in 9 VAC 5-140-940 for the initial allocation be based on five years of historic input data (1995-1999) instead of the four that were used to calculate the allocation in the current table (1995-1998). Using five years of historic data would make the initial allocation methodology more consistent with the methodology laid out for subsequent allocations.

**RESPONSE**: Please see response to comment #42.

153. **SUBJECT:** Allocation based on permit limit

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** The allocation methodology in 9 VAC 5-140-420 states that the allocation would be made on the basis of "0.15 lb/mmBtu or the unit's permitted NOX

limit (expressed as lb/mmBtu), whichever is less". We recommend that all the units listed in the table in VAC 5-140-940 receive allocations at the rate of 0.15 lb/mmBtu regardless of their prevailing permit limits. Units that enter the pool for allocations from the existing EGU budget following the initial allocation period should receive allocations as stated in the proposed rule.

**RESPONSE**: Please see response to comment #43.

154. **SUBJECT:** Definition of "units permitted NOx limit"

**COMMENTER:** August Wallmeyer, Executive Director, Virginia Independent Power Producers, Inc., 700 E. Franklin Street, Suit 601, Richmond, VA 23219

**TEXT:** Finally, the phrase "unit's permitted NOX limit" needs to be clarified since many units have multiple permit limits for NOx emissions depending on which of the permitted fuels it is burning and/or under which of its permitted operating scenarios it is performing. We suggest specifying "the least stringent of the unit's permitted NOX limits".

**RESPONSE:** Please see response to comment #44.

155. **SUBJECT**: Equitable Allowance distribution

**COMMENTER:** Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

TEXT: Tenaska is seeking the Virginia Department of Environmental Quality's careful consideration of the potentially anti-competitive aspects of the State Implementation Plan (SIP) for nitrogen oxide (NOx) emission control. Tenaska has invested and will invest substantially in Virginia to meet the Commonwealth's increasing demands for electricity and we are committed to supply reliable, competitively priced electricity to our customers from state-of-the-art, environmentally responsible facilities. As a member of the Electric Power Supply Association and a representative of wholesale power generators and developers of efficient, low-emission facilities, we appeal to you for equitable treatment in this important rulemaking.

Because of the ongoing deregulation of our industry, we bring competitive market pressure to bear on incumbent utilities to lower prices. Any NOx SIP rule that would discriminate among electric generation sources would adversely affect that competitive pressure. Potential inequities in the distribution of allowances under the SIP would interfere with this process, with unintended economic consequences for Virginia. Discriminatory treatment of new sources would create an economic barrier to market entry by new, clean power generating facilities that could otherwise help achieve environmental goals and generate electricity at lower cost for Virginia consumers.

In recognition of these threats, the Assembly enacted legislative provisions that require emissions trading rules applicable to the electric generating industry that will foster competition and encourage construction of clean, new generation facilities. We support the Assembly's action and in response to your request for input, offer the following additional recommendations.

**RESPONSE:** Please see response to comments #34, #35, #36, #37, #38, #39, #43 and #44.

156. **SUBJECT:** Size of new source set aside

<u>COMMENTER</u>: Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT:** To meet the Assembly's intent, Tenaska suggests rule provisions that would ultimately provide absolutely equal treatment of all electric generating industry participants in Virginia. Our specific recommendations concerning allowance allocation and timing are summarized as follows:

There should be a new source set-aside sufficient for anticipated new electricity generation in Virginia. The Assembly has set a level of 5 percent for each of the first five years of the program and 2 percent each year thereafter.

**RESPONSE:** Please see response to comments #37 and #38.

157. **SUBJECT:** Definition of "new electric generating facility"

**COMMENTER:** Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT:** Based on the anticipated number of new sources, the set-aside is likely to be insufficient to cover new sources on the same basis (0.15 lbs/mmbtu of heat input, or the core emission rate) as sources that were operating in the baseline period. Tenaska recommends consideration of an allocation for new sources that would be:

Limited to those units that commence commercial operation, as defined in the Acid Rain Program Rules (40 CFR 72.2), by the first day of each control period;

Established based on the core emission rate, the maximum design heat input of each unit, and a capacity factor of 25% for simple cycle combustion turbines and 80% for all utility steam electric generating units, including combined cycle units;

Allocated among new sources on a pro-rata basis rather than first come, first serve, so

that there will be equal treatment, at least among all new sources.

**RESPONSE**: Please see response to comments #37 and #38.

158. **SUBJECT**: Allocation update

**COMMENTER:** Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT:** After the 2004 compliance period, DEQ should re-allocate allowances among all sources operating during that season on an equal, 0.15 lbs/mmbtu basis for the 2009 compliance season, and follow the same procedure each year thereafter.

**RESPONSE**: Please see response to comment #39.

159. **SUBJECT:** Allocation methodology

**COMMENTER:** Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT:** Heat input data could be based on the highest two years of the previous five, but sources with only a single year of operation should not be excluded from the re-allocation.

**RESPONSE:** Please see response to comment #42.

160. **SUBJECT:** Adoption of the same allocation timeframe for EGUs and nonEGUs.

<u>COMMENTER</u>: Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT:** It may be appropriate to have different allocation provisions for EGUs and non-EGUs. The electric generation industry is characterized by rapid growth and deregulation, and it bears a legislative mandate to foster competition. These factors do not necessarily apply to other industrial sectors, i.e., nonEGUs.

**RESPONSE:** Please see response to comments #34, #35, and #36.

161. **SUBJECT:** New source set aside for nonEGU sources

**COMMENTER:** Greg Kunkel, Ph.D., Manager of Environmental Affairs,

Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT**: Tenaska offers no opinion.

**RESPONSE**: No changes have been made to the proposal based on this comment.

162. **SUBJECT:** Where should the EGU new source set aside come from?

<u>COMMENTER</u>: Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT:** The EGU budget, which includes a significant growth factor over the baseline period, should be sufficient to support the new source set-aside. However, DEQ may wish to consider including budget amounts associated with erroneously listed units, e.g., those smaller than 250 mmbtu/hr or non-fossil fuel units.

**RESPONSE**: Please see response to comment #35.

163. **SUBJECT:** Distribution of new source set aside

<u>COMMENTER</u>: Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT:** To achieve equity among new sources, Tenaska recommends pro-rata distribution of set-asides to those having commenced commercial operation by the first day of the control period, utilizing the core emission rate, maximum design heat rate, and appropriate capacity factors. There need not be a surrender mechanism.

**RESPONSE**: Please see response to comment #37.

164. **SUBJECT:** Definition of "new generating facilities"

<u>COMMENTER</u>: Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT:** For the initial allocation period, new sources are units not included in the initial allocation that commence commercial operation by the first day of the compliance period in question. For subsequent allocations, all units that have operated within the last five years should be included as existing or baseline units and new units would only include all other units that commence commercial operation by the first day of the control period.

**RESPONSE**: Please see response to comments #37 and #38.

165. **SUBJECT**: Subsequent allocations

<u>COMMENTER</u>: Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

TEXT: We recommend annual allocations, starting after the 2004 compliance period, with all EGUs that have commercially operated during the previous five year period treated exactly the same using the core emission rate and pro rata adjustment of allocations against the available budget. Permitted emission rates should definitely not be used because permits have been issued over a very long period of time and are inherently unequal. Therefore, their use as a basis for allowance allocations would be anti-competitive. New, cleaner units would be penalized significantly under such a program, thereby in conflict with the Virginia statute requiring that competition from new facilities be encouraged.

**RESPONSE**: Please see response to comments #39 and #43

166. **SUBJECT:** New source set aside

<u>COMMENTER</u>: Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

TEXT: The Virginia Assembly recognized the need to provide an allocation of NOx allowances for new EGU sources and set a level of five percent of its budget for each of the first five years of the program with two percent available each year thereafter. We have provided our input regarding ways to allocate and schedule the distribution of those allowances. Ultimately, we believe that the best approach is one that assures new entrants into Virginia's electric generation market neither advantages or disadvantages in market participation. In other words, we are seeking access to emissions allowances with the same rights, terms and conditions that existing EGUs will enjoy. Such a level playing field environment for competition, in both the electricity market and under the NOx SIP Call, is critical to the economic and environmental wellbeing of Virginia and is now required by statute.

**RESPONSE:** Please see responses to comments #37 and #44.

167. **SUBJECT**: General comment

<u>COMMENTER</u>: Greg Kunkel, Ph.D., Manager of Environmental Affairs, Tenaska Virginia Partners, L.P., Tenaska Virginia, Inc., 1044 North 115<sup>th</sup> Street, Omaha, Nebraska 68154

**TEXT**: Today's electric power industry is undergoing extensive and fundamental changes. The way we use existing power plants, the number and type of plants to be built or rebuilt and the range of services provided to customers are all changing dramatically.

In Virginia, as elsewhere across the United States, the electric industry includes lowemission, advanced technology generation facilities whose owners successfully compete in an increasingly open marketplace. Virginia's rapidly increasing demand for electricity and new market opportunities has encouraged Tenaska and others to plan the construction of additional clean and efficient generating capacity to serve Virginia's homes, businesses and industry.

The development of new generation capacity in Virginia presents a unique opportunity to significantly reduce NOx emissions per unit of electricity, helping to achieve the State's NOx budget while reducing the cost of electricity through competition. Innovation and competition, however, depend on the accessibility of the marketplace to new competitors.

**RESPONSE**: Support for the proposal is appreciated.

168. **SUBJECT:** Simplified regulatory program

<u>COMMENTER</u>: Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

**TEXT:** This issue does not affect our membership. We believe that the decision should be made by the Board in consultation with the affected non-EGU units.

**RESPONSE:** Please see response to comment #34

169. **SUBJECT:** NonEGU set aside

<u>COMMENTER</u>: Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

**TEXT:** This issue does not affect our membership. We believe that the decision should be made by the Board in consultation with the affected non-EGU units.

**RESPONSE:** Please see response to comment #35.

170. **SUBJECT:** Where should the EGU set aside come from?

<u>COMMENTER</u>: Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

**TEXT:** The set aside should be taken from the entire state budget first, to the extent that the set aside can be taken from that portion of the non-EGU budget that has not been allocated to non-EGU units.

**RESPONSE**: Please see response to comment #36.

171. **SUBJECT:** Distribution of the set aside

**COMMENTER:** Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

TEXT: The set aside should be distributed annually on a pro rata basis to all new generating units that demonstrate that they qualify for an allocation from the new source set aside budget (see response to e, below) and request an allocation at least 30 days prior to the date that the DEQ must submit the NOx allowance allocations to the Administrator. For the first allocation period, this would mean any unit that is not listed in the table in 9 VAC 5-140-940, but has begun commercial operation on or before March 1, 2004. Requests received after March 1, 2004 would be included in the allocation of the set aside for the following year. Since the initial allocation period for existing EGUs is five years, a "new" unit would continue to receive an allocation annually from the new source set aside for each of the five years of the initial allocation period, then the unit would be considered an existing unit and receive its allocation from the existing EGU budget. Although the new unit would receive an allocation from the new source set aside for each of the five years in the initial allocation period, the allocation itself would have to be recalculated every year to consider the addition and deletion of other units in the "new unit" category.

We recommend basing the distribution of the new source set aside budget on the maximum design heat input of the unit since the new units do not have historic heat input on which to base the allocation. That is, DEQ would total the maximum design heat input of each of the units that requested an allocation, and distribute the allowances in proportion to the individual unit's heat input as a percentage of the total. This method of allocating allowances from the new source set aside budget should be used for allocations made both during the initial five-year period (when the new source set aside is 5% of the existing EGU budget) and in subsequent periods (when the new source set aside budget is reduced to 2% of the existing EGU budget). As with the existing units, if the new unit does not use all of its allocated allowances, the remaining allowances could be banked or sold.

**RESPONSE:** Please see response to comment #37.

172. **SUBJECT:** Definition of "new generating facilities"

<u>COMMENTER</u>: Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

**TEXT:** The term "new generating facilities" should apply to each new generating unit that has begun commercial operation, but does not receive an allocation as from the existing EGU budget. For the initial five-year allocation period, this would mean any unit that has begun commercial operation on or before March 1, 2004 but is not listed in the table in 9 VAC 5-140-940. Allocations should be available to all units that demonstrate that they meet the definition of "new generating facilities" and request an allocation at least 30 days prior to the date that the DEQ must submit the NOx allowance allocations to the Administrator. For the first allocation period, this would mean on or before March 1, 2004. Requests received after March 1, 2004 would be included in the allocation of the set aside for the following year. As noted in the previous response, we recommend that each new unit receive an allocation annually from the new source set-aside budget until it begins receiving an annual allocation from the existing EGU budget.

**RESPONSE**: Please see response to comment #38.

173. **SUBJECT:** Subsequent allocations

**COMMENTER:** Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

**TEXT:** Following the initial five-year allocation period, allocations should be made on an annual basis, for the control period five years in the future. For example, the first allocation (following the initial allocation period) would be made April 1, 2004 for the 2009 control period. This allocation would be based on historic heat input for the 19992003 control periods. Units with at least two control periods of historic heat input data would be included in the allocation of the existing EGU budget.

**RESPONSE**: Please see response to comment #39.

174. **SUBJECT**: State Budget

**COMMENTER:** Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

**TEXT:** In response to the Department's request for comment on how to redraft the proposed regulation to address the EPA comments in combination with the court decision, we agree with the Department's inclination that the budget should be lowered to meet the EPA budget. While we believe that the Department's proposed budget more accurately reflects the actual emissions generated in Virginia during the years designated for the inventory development, and we support the Department in its efforts to correct the EPA inventory, we do not want to jeopardize the approvability of the proposed rule and encounter the sanctions proposed by the EPA.

**RESPONSE**: Support for the proposal is appreciated.

175. **SUBJECT**: Individual unit allocation percentage

**COMMENTER:** Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

**TEXT:** We also agree that the rule should be revised to accommodate the possibility that the budget may be revised in response to the court remand. However, instead of removing the initial allocations from the rule entirely, we recommend that the allocations be presented in the table in 9 VAC 5140-940 as a percentage of the final budget instead of in tons of NOx.

**RESPONSE:** Please see response to comment #41.

176. **SUBJECT**: Heat input data

<u>COMMENTER</u>: Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

**TEXT:** In addition to responding to the requests for comments on specific issues, we also submit two comments on the proposed allocation methodology. First, we recommend that the percentages in the table in 9 VAC 5-140-940 for the initial allocation be based on five years of historic input data (1995-1999) instead of the four that were used to calculate the allocation in the current table (1995-1998). Using five years of historic data would make the initial allocation methodology more consistent with the methodology laid out for subsequent allocations.

**RESPONSE**: Please see response to comment #42.

177. **SUBJECT**: Allocation based on permit limit

**COMMENTER:** Gary E. Tillman, Plant Manager, Birchwood Power Partners, L.P., 10900 Birchwood Drive, King George, Virginia 22485

TEXT: Second, the allocation methodology in 9 VAC 5-140-420 states that the allocation would be made on the basis of "0.15 lb/mmBtu or the unit's permitted NOx limit (expressed as lb/mmBtu), whichever is less". We recommend that all the units listed in the table in VAC 5-140-940 receive allocations at the rate of 0.15 lb/mmBtu regardless of their prevailing permit limits. Units that enter the pool for allocations from the existing EGU budget following the initial allocation period should receive allocations as stated in the proposed rule. Additionally, the phrase "unit's permitted NOx limit" needs to be clarified since many units have multiple permit limits for NOx emissions depending on which of the permitted fuels it is burning and/or under which of its permitted operating scenarios it is performing. We suggest specifying "the least stringent of the unit's permitted NOx limits".

**RESPONSE:** Please see responses to comments #42 and #43.

## 178. **SUBJECT:** Burden of compliance

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

TEXT: These regulations, which were adopted by the SAPCB last November, represent the efforts of an ad hoc Advisory Group established by the Department of Environmental Quality (DEQ) to address a number of important issues related to EPA's NOx SIP Call rule. Dominion participated actively in this consensus effort, and commends the ad hoc Advisory Group and the DEQ for drafting regulations that meet the requirements of EPA's rule in a way that attempts to minimize in as much as possible the burden of compliance for affected sources in Virginia.

**RESPONSE**: Support for the proposal is appreciated.

179. **SUBJECT**: General comment

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** Dominion offers the following comments in response to the DEQ's request. While it is obvious the proposed regulations must be changed to satisfy the General Assembly mandate (noted above), Dominion urges the SAPCB to retain all of the other aspects and provisions of the regulations as drafted and proposed, with the few exceptions noted below.

**RESPONSE**: Support for the proposal is appreciated.

180. **SUBJECT**: Program flexibility

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

TEXT: Dominion operates over 8500 mw of fossil fuel-fired generation that is subject to EPA's NOx SIP Call rule, about 6800 mw of which is in Virginia. In order to comply with the level of reduction that will be required by the rule, Dominion will have to install selective catalytic reduction (SCR) technology and other NOx controls at an estimated capital cost of over \$600 million, and additional annual operating costs. This is a significant expenditure, and Dominion has already initiated the processes necessary to perform the required installations in as timely a fashion as possible to meet the May 31, 2004 compliance date. Given this commitment to significant capital expenditures to retrofit existing units, it is critical to Dominion that the State's SIP Call rule is developed in a way that provides us assurance that these investments are protected over a reasonable amount of time and that these units are not subject to additional reduction requirements that would make these units uneconomical to

operate. Dominion is currently a default electricity provider, with the responsibility to assure that there is and will be adequate power for the residents, businesses and industries in Virginia, and could be required by the Commission to continue serving in such a capacity beyond the deregulation transition period, which ends in 2007. It is therefore important that the implementation of this regulation allow as much flexibility and forward certainty as possible and allows us the ability to maintain a diverse fuel supply, including the use of coal, so that our commitment and ability to provide reliable and affordable power to Virginia is not compromised.

**RESPONSE**: The regulation has been structured to provide the most flexibility that is both practical and allowable by federal and state law.

No changes have been made to the proposal based on this comment.

181. **SUBJECT**: Early approval

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** It is also imperative that the State obtains approval of its SIP Call rule before May 2002 in order that affected sources will be guaranteed the opportunity to earn early reduction credits under the provisions of the state rule. EPA has indicated, through correspondence with the State of Indiana, that it may consider consolidating the distribution of allowances from the compliance supplement pool (CSP), which has been established under both the Section 126 rule and the NOx SIP Call rule by allowing the states the authority to distribute the CSP allowances for use to comply with both the Section 126 rule and SIP Call rule. Since EPA's model rule for the SIP Call allows the states flexibility in how to award early reduction credits and distribute allowances from the CSP (as long as the CSP established by EPA is not exceeded), the provisions governing ERC's and CSP allowances in some state rules differ from EPA's Section 126 rule. Consolidating the distribution of the CSP allowances under a single entity would eliminate confusion and provide affected sources more certainty as to how early reductions will be credited and how CSP allowances are awarded. Since the Virginia state rule allows more flexibility in the determination of early reduction credits than EPA has elected to provide in its Section 126 rule, the ability to earn early reduction credits under the state rule would provide affected sources much needed flexibility in achieving compliance with the extremely tight compliance deadline under the Section 126 rule. Although a recent Order issued by the U.S. Court of Appeals for the District of Columbia Circuit has tolled the May 1, 2003 compliance date for the Section 126 rule, pending EPA's response to the same Court's remand of issues related to the NOx emission budgets under the rule, there still remains the possibility that emission reductions will be required for at least a portion of the 2003 ozone season. Therefore, if EPA should allow the states the authority to distribute allowances from the state's compliance supplement pool under the provisions of the state rules, and allow the use of the CSP allowances for compliance with the Section 126 rule during the 2003 ozone season, it will be necessary for the state to

obtain approval of its SIP Call rule before May of 2002. We therefore urge the DEQ to expedite the finalization of this rule and continue working with EPA to achieve timely approval of the rule.

**RESPONSE**: Support for the proposal is appreciated. Work is being done to ensure that the regulation and SIP submittal are provided to EPA for approval as expeditiously as practicable.

# 182. **SUBJECT**: State budget

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** The proposed regulations set a seasonal NOx budget for egu's that exceeds the budget established by EPA in its SIP Call rule to more accurately account for both realized and future expected growth in electricity generation in the State. In the preamble to the regulation, the DEQ explains the basis for the budget modification. The proposed increase to the EGU budget would allow more flexibility in addressing the concerns of both existing (baseline) and new generation in the State.

Dominion has supported the DEQ's efforts to include a modified NOx budget for electric generating units (EGU's) in Virginia, and believes there is sound justification for a larger budget than EPA has established in the SIP Call rule. In developing the budget for egu's in the NOx SIP Call, EPA applied state-specific growth factors to the baseline 1996 statewide ozone season egu heat inputs to project statewide heat inputs for the year 2007. For Virginia, EPA assumed a 32% growth over an 11-year period (1996-2007) or 2.9% per year. It is interesting to note that data released by EPA in a recent Notice of Data Availability (66 Fed. Reg. 40609) indicates that fossil fuel electric generation ozone season heat inputs in Virginia have increased by 25% over the last 4 years (1996-2000) to a level that is already 95% of EPA's projected 2007 levels. Net electric power generation in the state of Virginia (mwhs) increased by 18.7 % over the 4-year period 1996-2000, at an average rate of 4.7% per year. Fossil-fired generation, the generation subject to the SIP Call budgets, accounted for 80% of this growth, increasing by 28.9% (at an average rate of 7.2% per year) over the 4-year period. Furthermore, EPA's modeling assumptions used to generate the state-specific growth factors, which relied upon an extrapolation of growth projected over a nine-year period (2001-2010), projected that approximately 1800 mw of new gas-fired generation would be needed to meet increasing electricity demand in Virginia and then pro-rated this estimate to an 11-year growth applied to the period 1996-2007. Yet, according to data published by the Virginia DEQ (Attachment 2), almost 12,000 mw of new gas-fired generation is planned in Virginia over the next several years, an almost four-fold increase from EPA estimates. If this is correct, EPA has seriously underestimated the amount of future generation in Virginia, which then underestimates future electric generation heat inputs since this growth will be met with fossil fuel-fired generation.

The U.S. Court of Appeals for the District of Columbia has likewise noted deficiencies in

EPA's electric generation growth assumptions and methodology applied in establishing the state-specific NOx emission budgets in its recent decision to remand the growth factors back to EPA. Thus, there remains considerable uncertainty as to whether EPA's budgets will stand, or whether EPA will need to adjust the budgets in a subsequent rulemaking.

Coupled with this uncertainty, is the fact that EPA has already noted the Virginia proposed modified EGU budget as an almost certain cause for Agency disapproval of the rule and the Virginia SIP. Dominion is both cognizant of and concerned about the potential implications of an EPA disapproval. Regardless of what transpires in the Courts, the State will ultimately be required to meet either EPA's current budget or an EPA-modified budget. Accordingly, Dominion recommends that the DEQ modify its proposed rule to simply list the baseline sources and units that would receive initial allocations under the rule without specifying specific unit allocations in the rule, and incorporate EPA's budget by reference. While the actual unit-specific allocations would be made outside of this regulatory process, the allocation methodology would (and must) remain in the rule. This approach would allow timely adjustments to the budget, if EPA should modify the budgets in response to the Court remand, without requiring the DEQ to go through the lengthy regulatory adoption process. This would also increase the likelihood of the State receiving EPA approval of the rule before the sanction clock expires in July 2002 and would avoid federal administration of the SIP Call program in Virginia. It would also increase the possibility of approval prior to the start of the 2002 ozone season, which would assure sources subject to the rule the ability to earn early reduction credits during the 2002 ozone season under the provisions of this rule.

RESPONSE: Please see response to comment #41.

183. **SUBJECT**: Compliance Supplement Pool

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

TEXT: The proposed regulation also includes a modified amount of allowances under the compliance supplement pool (CSP) relative to the EPA rule. While we fully support the additional flexibility DEQ provides in the earning of early reduction credits and distribution of allowances from the CSP, we recommend that the state modify the CSP provisions of its rule to comport with EPA's rule in terms of the size of the CSP. The Court-ordered remand of the budgets did not apply to the compliance supplement pool. While Dominion believes there should be no limit to the pool, and that sources should be fully rewarded for early reduction credits actually achieved, non-compliance with the limits EPA has established in the rule will result in an EPA disapproval of the rule. The additional flexibility allowed by DEQ in the distribution of allowances from the CSP should not be cause for EPA disapproval, since such flexibility is allowed in the EPA rule (so long as the overall limit of the CSP is not exceeded), and we recommend the DEQ maintain the additional flexibility they have

provided in the rule. Following the method applied for the NOx budget, we recommend the State incorporate the size of the compliance supplement pool by reference, while retaining the ERC calculation and CSP distribution methodology in the rule. Since there are efforts underway requesting EPA to increase the size of the CSP, this would allow the DEQ to incorporate a revised CSP without a rulemaking process.

**RESPONSE**: Please see response to comment #1.

184. **SUBJECT:** Initial allocation

<u>COMMENTER</u>: Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** The recently passed legislation requires the DEQ to amend the length of the initial allocation period in its current proposal from 10 years to 5 years. It will provide new sources with the ability to obtain fixed allowances directly from the EGU budget in a more timely fashion while at the same time provide existing sources with a degree of certainty for forward planning purposes.

**RESPONSE:** Support for the proposal is appreciated.

185. **SUBJECT:** Subsequent allocations

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** For the same reason, Dominion advocates that the State reallocate allowances (for periods beyond the initial 5-year period) in 5-year blocks, and that reallocations be determined at least 5 years in advance of the period during which the allocations are valid. For example, allocations for the second allocation period (2009-2013) should be set by May 1, 2004. We note that even EPA abandoned the notion of annual reallocations that it initially suggested in its model rule (CFR Part 96) and established a 5-year block reallocation methodology in the federal NOx trading program (CFR Part 97). As new sources which have received allowances from the set aside are shifted into the pool of "existing" sources in subsequent allocation periods, the allocations for existing sources will steadily decrease. This will further restrict the operating capacity of this primarily baseload generation in the State and could result in forced unit shutdowns, retirements or force shifts to more expensive fuels amid uncertainties regarding the availability of alternative fuel supplies and the infrastructure needed to support the use of these fuels. It is important that the State avoid frequent reallocations of the budget that could compromise the operating ability of its baseload generation and could reduce allocations to a point where retrofits companies have invested in to comply with the SIP Call rule are no longer adequate to achieve the required reductions and become obsolete well before companies are able to obtain a return on their investments. As the Virginia Department of Planning and Budget (DPB) noted in its review of the State's proposed rule and its support for at a minimum the 10year initial allocation period originally proposed by the DEQ and the Ad-Hoc Advisory Committee, reallocation of allowances forces companies to "face both high contracting costs and a high degree of residual uncertainty. And the shorter the advance allocation window, the more severe will be the impact of the reallocation rule (17 Virginia Register 3171). Reallocations in 5-year blocks set 5 years prior to the applicable allocation period will provide at least some measure of certainty for existing sources and allow adequate time to adjust compliance strategies if needed.

**RESPONSE**: Please see response to comment #39.

186. **SUBJECT**: Heat input data

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

TEXT: Initial allocations for existing, baseline sources are calculated in the rule based on a 0.15 lb/mmBtu emission rate and the average of the two highest heat inputs (mmBtu) for the control periods 1995-1998. Dominion supports the methodology based on the 0.15 lb/mmBtu rate, but advocates that the State modify the rule to use heat inputs over the 5-year period 1995-1999 to determine initial allocations. We also advocate that reallocations for the baseline sources be based on the core (0.15 lb/mmBtu) emission rate since the cost-effectiveness criteria and economic impact analysis EPA used in support of the SIP Call rule was based on an assumed 0.15 lb/mmBtu emission rate for the baseline sources. As additional (new) sources begin to draw from the main pool of allowances in subsequent allocation periods, the effective emission rate for these older sources will actually fall below 0.15 lb/mmBtu since the total emission pool is capped.

**RESPONSE**: Please see response to comments #37 and #42.

187. **SUBJECT**: Allocation based upon permit limit

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** Since new units are already required to meet emission rates significantly lower than 0.15 lb/mmBtu, irregardless of the SIP Call rule, and the cost of meeting lower emission rates has already been factored into business plans, it does not make sense to base allocations for these sources on a level significantly higher than they are allowed to emit. We therefore advocate that the rules allocate NOx emissions based on the lesser of a 0.15 lb/mmBtu or the permitted emission rate for new (non baseline) sources as they are entered into the pool of mainstream sources receiving allowances from the main allowance pool.

**RESPONSE**: Support for the proposal is appreciated.

### 188. **SUBJECT:** No output based allocations

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

TEXT: During the public hearing, held by the DEQ on August 22nd, several parties advocated for the use of output-based approaches to determine NOx allocations. EPA had considered such an approach in the development of the SIP Call rule and the Section 126 rule, but opted to use heat input rather than electrical output as the basis for calculating allocations in the final rules. Accordingly, the DEQ and the Ad-Hoc Technical Advisory Committee decided to follow EPA's lead and based the allocation methodology using heat inputs. Dominion believes the State should retain the use of heat inputs in the rule. There are many issues and details related to the use of output-based approaches that the State and the Ad-Hoc Committee would need to address and has not yet addressed. We believe the DEQ should not move forward with an output-based rule unless and until such issues are appropriately addressed through a proposal and public review process.

**RESPONSE**: Support for the proposal is appreciated. Please see response to comment #75.

189. **SUBJECT:** Definition of "new generating unit"

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** Arguments have been made by some that any source not in the baseline inventory that is currently operational or operational upon the effective date of this rule should be granted allowances from the existing budget during the initial allocation period, rather than from the new source set aside. Dominion would support this concept only if the baseline budget was appropriately adjusted (increased) to incorporate these source emissions within the baseline budget. To the extent that the emissions from these sources have not been incorporated into the baseline budget, they should not be eligible for allocations from the main pool of allowances under the rule. The main pool of allowances (that is, the EGU budget minus the 5% set aside) must be reserved for the sources that make up the baseline. While some claim that forcing owners of new (non-baseline) sources to acquire NOx allowances from baseline sources is an unfair barrier to entry that stifles competition, the DPB noted that "while buying allowances is a cost of entry, it is not in any significant sense a barrier to entry any more than buying a lease, paper clips and computers is a barrier to doing business. They are not barriers to entry". Furthermore, the General Assembly addressed the issue by directing the DEQ to include a 5% set-aside for new sources to accommodate additional new sources, including sources that became operational after the baseline year. Accordingly, Dominion urges the Board to retain the approach employed in the proposed rule and allocate allowances to only baseline units in the initial allocation period.

**RESPONSE**: Support for the proposal is appreciated. Please see response to comments #37and #38.

190. **SUBJECT**: Subsequent allocations

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT**:\_Based on our recommendation for reallocations in 5-year blocks (every 5 years) set 5 years in advance of the period for which the allocations are valid, sources must be operational before May 1st of the year preceding the year during which the allocations are set (determined) in order to be eligible for direct allocations from the main pool of NOx allowances. For example, only those sources operational before May 1, 2003 would be eligible for allocations from the main pool of allowances for the second allocation period (2009-2013). Sources that become operational on or after May 1, 2003 would receive allowances from the new source set aside for the 2009-2013 period.

**RESPONSE**: Please see response to comment #38.

191. **SUBJECT:** Were should the new source set aside come from?

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

TEXT: Dominion supports the establishment of a set-aside for new electric generation, with 5% of the EGU budget reserved during the initial allocation period and 2% for subsequent allocation periods as directed by legislation passed in the General Assembly this past January. To the extent that the DEQ could account for reductions in other source sectors not currently subject to EPA's emission caps, including mobile sources, that are not accounted for in EPA's baseline inventory, Dominion would support using such credits toward the new source set-aside in lieu of taking the set-aside tonnage out of the existing egu budget.

**RESPONSE:** Please see response to comment #36.

192. **SUBJECT:** NonEGU set aside

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** The proposed regulations at this time do not provide a set-aside pool of allowances for new sources in the "nonEGU" category. Dominion is not advocating that such a set aside be established. However, should the State wish to make set-aside allowances available for new non-equ sources, it should reserve

allowances from the non-egu budget to do so. New nonEGU's should not be eligible for allowances from the new source set-aside that will be established from a portion of the EGU budget by way of the recent legislative mandate.

**RESPONSE**: Please see response to comments #34 and #35.

193. **SUBJECT**: Definition of "new generating facility"

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

TEXT: The DEQ solicited comment on what should constitute a "new" source eligible for an allocation from the new source set aside. Dominion believes that any EGU source that meets the criteria subjecting it to the SIP Call rule that became operational after the baseline year upon which EPA's budget was based (on or after January 1, 1997) should be eligible for allowances from the new source set aside during the initial allocation period (2004-2008). In addition, sources meeting this criteria must actually be in operation as of the beginning of the control period for which the allocation (from the set aside) is to be made. Based upon our previous recommendation for reallocations in 5-year blocks (every 5 years) set 5 years in advance, sources that become operational on or after May 1st of the year preceding the year during which the allocations for a given 5-year period are determined would be eligible for allocations from the new source set aside (that is, sources that become operational on or after May 1, 2003 should receive allocations from the new source set aside for the second allocation period (2009-2013).

**RESPONSE**: Please see responses to comments #38 and #39.

194. **SUBJECT:** Distribution of set aside

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

TEXT: Dominion believes allowances to new sources from the new source set aside should be allocated in as equitable manner as possible. We recommend that the State distribute these allowances on a pro-rata basis, similar to the approach applied by EPA in the federal NOx trading program (CFR Part 97). This would include redistributing any unused allowances from the set aside back to existing baseline units on a pro-rata basis. While we recommend the DEQ use as much of the language of CFR Part 97 as possible for purposes of distributing allowances from the set aside, caution must be exercised to assure that applicability dates, application deadlines, etc. are set in conjunction with the allocation periods set in the State rule (which differ from the Part 97 rule).

**RESPONSE**: Please see response to comment #37.

# 195. **SUBJECT**: Early reduction credits

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** Given the substantial costs and difficulties associated with meeting the requirements of the SIP Call, we believe the State should incorporate as much flexibility as possible into the provisions of the early reduction portion of the rule that will help ease the financial burden to affected sources and provide more certainty to the planning process. Early reduction credits are good for the environment and should be encouraged. But decisions to early comply are also serious business decisions, involving significant early investments in capital and labor in order to be assured the ability to compensate for unexpected delays or complications in installing and operating control technologies needed to meet reduction requirements.

We commend the DEQ for allowing additional flexibility in terms of how ERC's can be generated relative to the methodology recommended by EPA in its model rule and applied by EPA in the Section 126 rule. We disagree with those who contend that the 0.35 threshold rate is flawed and favors older plants. The 0.35 rate is actually already a compromise on the part of older, existing facilities since it is well below Title IV levels for many of these sources. Furthermore, the DEQ rule requires the DEQ to consider all requests for ERC's during the ozone season during which early reductions are generated, and to provide source specific allocations from the CSP on a pro-rata basis. Thus, all sources applying for ERC's are guaranteed a pro-rata share of the allowances.

While we support the 0.35 lb/mmBtu threshold, the rules should ensure that allowances from the CSP are not issued for reductions not actually achieved if a unit's emission rate before reductions is already below the 0.35 lb/mmBtu threshold, and that the threshold emission rate for such units be at least 20% lower than the rates achieved prior to the reductions.

**RESPONSE**: The CPS has been structured to provide flexibility and equity in the distribution of these allowances.

196. **SUBJECT:** Early verification of ERCs

<u>COMMENTER</u>: Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** We also support the provisions DEQ has incorporated that allows sources to reserve credits for early reductions it intends to make during the 2002 and 2003 ozone seasons, and we strongly urge the Board to retain these provisions in the rule. However, the current proposal does not verify reductions made during the 2002 ozone season until November 1, 2003 and does not actually award any allowances from the CSP until February 2004. Since most, if not all, of the sources subject to this

rule are also subject to the Section 126 rule, which in spite of the recent Court Order tolling the May 1, 2003 compliance date could still require compliance sometime within the 2003 ozone season, the opportunity for sources to generate early reduction credits will be primarily limited to the 2002 ozone season. Few early reduction credits are likely to be generated during the 2003 ozone season. Therefore, Dominion advocates that the draft rule be amended to require the DEQ to verify early reductions achieved during the 2002 ozone season as early as possible following the 2002 ozone season (preferably by November 1, 2002), calculate ERC's and award allowances from the CSP for the credits generated during the 2002 ozone season by no later than February 1, 2003. This will not only provide sources with more lead time as to how many credits and allowances they have earned to facilitate compliance planning, but will also allow the use of such credits for compliance with Section 126 requirements if EPA moves to consolidate the distribution of the CSP allowances under the Section 126 rule and the NOx SIP Call rule. Dominion advocates the issuance of CSP allowances following the ozone season during which early reduction credits are achieved irregardless of what transpires with respect to the Section 126 compliance date. To the extent that DEQ deems it necessary to reserve any CSP allowances for early reductions that may be generated during the 2003 ozone season, we recommend that DEQ reserve a limited number for that purpose (no more than 10 to 20%). Should less than amount of CSP allowances available for distribution for reductions achieved during the 2002 ozone season be allocated, the remainder should be rolled over and made available for distribution during the 2003 ozone season.

**RESPONSE:** All indications are, at this point, that most sources will not be subject to the Section 126 rules and for EGU's the 126 rules will not start until May 2004. The dates for the compliance supplement pool have been set based on information from EPA.

No changes have been made to the proposal based on this comment.

197. **SUBJECT:** Administration of Section 126 Rule

**COMMENTER:** Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT:** Dominion further recommends the DEQ include language that would allow the use of early reduction credits achieved during the 2002 ozone season to be used during the 2003 ozone season for compliance with the Section 126 rule in the event compliance is still required at some time within the 2003 ozone season, and in the event that EPA consolidates the distribution of CSP allowances under the Section 126 rule and the NOx SIP Call rule and grants states the authority to do so under their state rules.

The current proposal also requires sources that intend to achieve early reductions during the 2002 ozone season and reserve allowances for such credits (under the credit reservation provision of the rule) to submit their request by October 1, 2001, and

requires DEQ to process the request by December 1, 2001. Since the rule will not be final by these dates, we recommend the dates be moved to sometime after January 1, 2002 but before May 1, 2002.

**RESPONSE**: Virginia has no authority to implement provisions of the 126 rule as it is a federal regulation, unless expressly delegated by EPA and the rule is adopted by Virginia.

No changes have been made to the proposal based on this comment.

198. **SUBJECT:** Environmental set aside

<u>COMMENTER</u>: Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

<u>TEXT</u>: During the public hearing, arguments were made supporting portions of the EGU budget to be reserved for renewable sources and/or sources meeting certain efficiency requirements. Some advocated for simply retiring a portion of the EGU budget for "environmental benefits".

EPA maintains that the level of reductions mandated by the SIP Call, which will result in large reductions in NOx emissions (at considerable expense to affected sources) and ozone concentrations throughout Virginia and the SIP Call region, are cost-effective reductions. EPA further maintains that these levels of "cost-effective" reductions are sufficient to address the transport issues for which the rule was intended. Additional reductions are therefore not needed and any additional reductions in the existing budget to create additional set asides will increase the cost of compliance for the affected sources. Furthermore, EPA itself did not establish additional set-asides for renewables, efficiency or "environmental benefit" in its federal NOx trading program (CFR Part 97).

Accordingly, Dominion does not believe it is necessary or appropriate for the DEQ to incorporate additional set-asides in the rule.

**RESPONSE**: Support for the proposal is appreciated. Please see response to comment #32.

199. **SUBJECT**: Local impacts due to trading

<u>COMMENTER</u>: Leonard R. Dupuis, Manager, Environmental Policy, Dominion Generation, 5000 Dominion Boulevard, Glen Allen, VA 23060

**TEXT**: There were recommendations made during the public hearing that the rule should contain provisions requiring that all transactions regarding emissions trading under the rule be approved by a State "trading review board". Proponents of

such measures claim such measures are necessary to prevent the trading of emissions that would exacerbate local nonattainment problems in the Northern Virginia region. Dominion believes such a requirement is not necessary from an environmental perspective, and would severely disrupt and discourage trading transactions that will increase the cost of compliance with the rule. As stated previously, EPA's SIP Call rule has been designed in the form of a cap-and-trade program to address the transport issue, and EPA's cost impact analysis used to determine "cost-effective" controls for implementation of the SIP Call assumed unrestricted trading across the multi-state SIP Call region for affected sources. In addition, there are mechanisms within the Clean Air Act that states can implement independent of the SIP Call to address local air quality impacts and concerns. Furthermore, the proposed trading rule contains a flow control mechanism that regulates the use of banked allowances (when the number of banked allowances exceeds ten percent of the total NOx trading budget), which is a requirement for EPA approval of the rule. For these reasons, Dominion strongly urges the Board not to include any provisions that would further restrict trading in any way in the rule.

**RESPONSE**: Support for the proposal is appreciated. Please see response to comment #24.

200. **SUBJECT:** Support comments by Virginia Manufacturers Association (VMA)

**COMMENTER:** Thomas G. Botkins, Jr., Environmental Manager, Westvaco, Packaging Resources Group, 104 East Riverside Street, Covington, VA 24426 1238

**TEXT:** Westvaco supports the comments submitted by the Virginia Manufacturers Association. In addition to those comments, Westvaco requests that the Department consider the following additional information.

**RESPONSE:** Please see response to comments provided by the VMA.

201. **SUBJECT:** Unit allocations for facility

**COMMENTER:** Thomas G. Botkins, Jr., Environmental Manager, Westvaco, Packaging Resources Group, 104 East Riverside Street, Covington, VA 24426 1238

**TEXT:** Westvaco believes that the current budget allowances for the Covington facility are not correct. The attached information should be used to calculate the correct budget allowances. In addition, Westvaco agrees with the VMA comments regarding unit identification. Based upon the difficulties related to establishing the correct budgets, it seems appropriate for Virginia to identify affected units in the regulation, but to establish the emission budget for those units in a separate document that can be updated as necessary without a regulatory change.

**RESPONSE:** Allocations for all nonEGU facilities is based on a method similar to the method used in 40 CFR Part 97. This method uses historical heat input data along with an emissions control rate of 0.17lbs of NOx per million BTUs as the basis for the allocation. It should be noted that all heat input data used for the allocation calculations have been provided by the sources. In fact, a specific request to the sources for this data was made to ensure that the most accurate data was used for the 1999 data. The allocations will not be published as part of the regulation.

NonEGU unit allocations are determined using the following method:

First, baseline utilization levels are determined using the average of the two highest ozone season heat input values for each unit during the period from 1995 to 1999.

The allowance allocation is then determined by multiplying the baseline level by the control fperiod emission rate of 0.17 lbs of NOx per mmBtus.

If the total amount allocated to all affected units does not equal the total trading budget, the allocated allowances are adjusted so that the total number of NOx allowances allocated equals 95 percent of the total state trading program budget. (This adjustment is made by multiplying each unit's allocation by 95 percent of the total state trading program budget; dividing by the unadjusted total number of NOx allowances allocated; and rounding to the nearest whole number.)

All heat input data used for the allocation calculations have been provided by the sources. In fact, a specific request to the sources for this data was made to ensure that the most accurate data was used for the 1999 data. The allocations will not be published as part of the regulation.

202. **SUBJECT:** Fair and equitable program

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

TEXT: This letter contains Georgia-Pacific Corporation's ("G-P') comments on DEQ's proposed NOx Emission Budget Trading Program rule, 9 VAC 5 Chapter 140, in response to DEQ's July 16, 2001 notice seeking public comment. As you know, G-P owns and operates a paperboard manufacturing mill at Big Island, Virginia, which has two non-electric generating units ("non-EGUs") that would be "core sources" subject to the new NOx trading rule as proposed. Therefore, G-P has a vital interest in ensuring that the DEQ promulgates a final NOx budget-trading rule that accurately and fairly allocates NOx allowances, imposes the least possible burden on regulated entities, and accords sources the most flexibility possible in meeting their

compliance obligations.

**RESPONSE**: Please see response to comments #34, #35, #36, #37, #38, #39, #43 and #44.

203. **SUBJECT:** Support for VMA comments

**COMMENTER:** Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** As a member of the Virginia Manufacturers Association ("VMA"), G-P supports and joins in the comments submitted by VMA. G-P will not repeat all of the points made by VMA; rather, G-P will attempt to comment mainly on issues not raised by VMA or on which G-P has different or additional comments. We respond to specific questions posed by DEQ in the order in which they appear in DEQ's Background Document.

**RESPONSE:** Please see responses to comments from VMA.

204. **SUBJECT:** Issues not affecting nonEGUs

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

TEXT: The first set of issues on which DEQ seeks comment (Background Document, p.7) arises out of the amendments made by the 2001 General Assembly to Virginia's emissions trading statute, VA Code § 10.1-1322.3. G-P's comments on these issues flow from the fact that the 2001 legislative changes apply only to the electric power industry (i.e., EGUs), and have no application or relevance to sources outside the electric power industry (i.e., nonEGUs). The new legislation does not require conforming changes to the nonEGU portions of the regulations, and G-P would not support any such changes unless they clearly benefit nonEGU sources.

**RESPONSE:** Please see response to comment #34.

205. **SUBJECT:** NonEGU allocation period

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** The Board should not change the initial allocation periods for non-EGUs from ten years to five. A ten-year period provides greater predictability in planning and budgeting for long-term compliance with applicable NOx limits.

**RESPONSE**: Please see response to comments #34 and #39.

206. **SUBJECT:** No set aside for nonEGU sources

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** DEQ should not create initial set-asides for non-EGU sources. The non-EGU sector does not anticipate the same rapid level of new growth apparently expected by some EGU sources. Rather, the full complement of initial non-EGU NOx allowances should be allocated at the outset to existing non-EGUs. If DEQ does decide to create non-EGU set-asides, it should not feel constrained to harmonize them with EGU set-asides, and instead should create them in the amount of 3% for the initial allocation period and 1% or 2% in succeeding allocation periods.

**RESPONSE:** Please see response to comment #37.

207. **SUBJECT:** Where should the set aside come from?

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** The set-asides mandated by the 2001 legislation were intended to apply only to the regulations "applicable to the electric power industry". Therefore, these EGU set-asides should be taken only from the EGU budget.

**RESPONSE:** Please see response to comment #36.

208. **SUBJECT:** No new source set aside for nonEGU sources

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** Again, the set-asides mandated by legislation apply only to EGUs and the EGU budget, and therefore the set-asides should be distributed as the EGUs deem appropriate. G-P prefers that no initial set-asides be created for non-EGUs. If DEQ does decide to create initial set-asides for non-EGUs, the set asides should be distributed equally (pro rata) to all non-EGUs that apply for them prior to November 1 of the year prior to the relevant ozone season, provided the new source will be in operation for the following ozone season. Unused set-asides should be returned equally (pro rata) to the non-EGU budget. The DEQ should institute a procedure whereby it would have to grant or deny the applications for available set-asides

sufficiently in advance of the start of the ozone season (e.g., by January 1) such that the existing non-EGUs can plan their own compliance based on the possible return of unused set-asides.

**RESPONSE**: Please see response to comments #37 and #38.

209. **SUBJECT**: Definition of "new generating facility"

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** The term "new generating facilities" in the 2001 legislation applies only to EGUs and should be defined as the EGUs deem appropriate. If DEQ decides, however, to create equivalent set-asides and therefore an equivalent "new non-EGU" term, then it should be defined as any non-EGU that didn't receive an initial allocation that is in operation at the beginning of a given allocation period. The set-asides should be made available only when the new non-EGU source begins operation.

**RESPONSE**: Please see response to comment #38.

210. **SUBJECT:** Subsequent allocations

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** Subsequent allocations should be computed for ten year periods, projected three years in advance.

**RESPONSE**: Please see response to comment #39.

211. **SUBJECT**: Initial allocations

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** The second set of issues arises in the course of DEQ's discussion of its methodology for making initial NOx allocations (Background Document pp. 8-10). G-P generally supports DEQ's use of the longer (1995-1998) time period in the section 126 rule for setting baseline utilization levels. In addition, except for those units such as Big Island Mill's no. 6 boiler that have recent, enforceable BACT limits substantially lower than 0.17 lbs./MMBTU (see section 4 below), G-P generally supports DEQ's use of unit-specific utilization data, i.e., the average of the two highest heat input values during the four year period for each unit, to establish unit-specific baseline utilization

rates. On the issue of heat input data availability for non-EGUs, (Background Document, p.9), however, GP urges DEQ to seek accurate baseline heat input data from affected non-EGUs, or at least accept and use such accurate data from non-EGUs who submit it, to establish utilization baselines rather than using actual ozone season NOx emissions for this purpose.

**RESPONSE**: Please see response to comment #201.

212. **SUBJECT**: Background document

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** G-P believes that the "Application of Controls" paragraph (Background Document, p.9) is unnecessarily confusing. DEQ discusses the applicable control level in terms of an across-the-board 60% emission reduction from uncontrolled levels. While a general control level of 60% was used by EPA to establish NOx budget targets, individual allowances were established by applying a NOx emission rate of 0.17 lbs/MMBtu to each unit's applicable baseline utilization rate (as in VAC 5-140-420(C). The regulations should describe the methodology for allocating individual units' NOx allowances, but should do so in terms of the 0.17 lbs/MMBtu criterion, not in terms of 60% reductions.

**RESPONSE**: The comments do not address the proposed regulation per se, but rather the agency background document. Since no specific recommendations have been made to the proposed regulatory language, no changes have been made to the proposal based on these comments. Please see response to comment #201.

213. **SUBJECT:** State budget

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** DEQ raises several questions concerning how it should modify the draft regulations in light of EPA's March 2001 comments, the D.C. Circuit's June 8, 2001 decision remanding EPA's NOx budget rule to reconsider growth factors, and the 2001 Virginia legislation.

The first issue DEQ raises is whether the regulation should continue to identify all sources and affected units and identify the NOx allocation for each such unit. (Background Document, p. 10). DEQ is concerned that EPA might modify the NOx budget in response to the D.C. Circuit's remand, requiring DEQ in turn to initiate a new rulemaking procedure to bring the unit allocations in Virginia's rule in line with the modified EPA budget.

As a practical matter, EPA has stated its intention not to modify the NOx budgets in light of the D.C. Circuit remand. EPA apparently has determined that its growth factors methodology and calculations are appropriate and that it will satisfy the remand by simply providing a better explanation of them. If this approach withstands further scrutiny by affected sources and the Court, then no actual changes to EPA's NOx budgets will be made.

In any case, G-P believes that DEQ should continue to list the affected sources, units, and individual NOx allocations, even if it might need to initiate a new rulemaking to modify the allocations in light of any NOx budget changes EPA ends up making. This would leave the DEQ in no worse position then any other affected state that has listed its sources' allocations, and it would avoid having to automatically abandon the discrepancies DEQ has previously identified in EPA's rule

**RESPONSE:** It would not be prudent to place the Commonwealth and sources in jeopardy of a FIP over the state budget. A more practical response is to identify the methodology for making allocations in regulation and continue the discussions of growth factors/inventory issues with EPA until a consensus has been achieved. Neither the citizens nor the sources are well served if discrepancies in budget numbers force a rulemaking change.

No changes have been made to the proposal based on this comment.

## 214. **SUBJECT**: NonEGU budget

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** DEQ asks next whether the Board should accept EPA's comment requiring EGU and nonEGU budgets to be lowered to make them consistent with EPA's budgets. G-P believes generally that DEQ should accept EPA's comment to the extent necessary to avoid SIP disapproval by EPA, while reserving its right to continue seeking legitimate corrections to EPA's budget based on EPA errors and miscalculations. It is not entirely clear, however, that EPA's comment requires reduction of the non-EGU budget. EPA stated in its March 2001 letter that the problem with Virginia's rule is that

"Virginia increased its State budget for electric generating units (EGUs) beyond what was assumed for the EGUs for purposes of the full State budget in the NOx SIP Call Rule. If the Virginia EGU budget is increased, Virginia must demonstrate that it will achieve offsetting reductions from sources under one or more other sectors such that the overall State budget will be met."

On its face, EPA's problem is only with the EGU budget, not the non-EGU budget. If that is the case, DEQ should consider making only conforming changes to the EGU

budget. If DEQ must in fact reduce both the EGU and non-EGU budgets, then it should do so only to the extent necessary to gain EPA approval, with the reservation of rights mentioned above.

**RESPONSE**: A consistent growth factor (all-be-it different than EPA's) was used for all source categories. Therefore, a modification to the overall state budget requires a modification to reflect the EPA growth factors. This modification will be seen in the budgets of all source categories.

No changes have been made to the proposal based on this comment.

215. **SUBJECT:** EPA comments

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

TEXT: DEQ asks finally whether it should accept and incorporate any or all of EPA's "non-mandatory" comments, i.e., those that EPA intends to improve the quality of Virginia's rule and make it consistent with the Part 97 rules without impacting its approvability. Without itemizing each of EPA's comments, G-P believes DEQ should use its discretion to accept or reject any EPA comments that amount only to wordsmithing of Virginia's rule, but accept any that in fact increase the amount of flexibility Virginia sources will have in complying with the NOx trading requirements and satisfying the Part 75 monitoring requirements, specifically including any that are deemed necessary to allow section 126 sources to trade with NOx SIP call sources.

**RESPONSE**: Please see response to the EPA comments, #1 through #18.

216. **SUBJECT**: 25 ton exemption

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT:** G-P urges DEQ to modify the 25 ton exemption provision [9 VAC 5-140-40 B] to allow exemption of otherwise-affected units that have effective, federally-enforceable limits restricting ozone season NOx emission to below 25 tons, even if such limits do not contain the specific operating hours provisions mentioned in the proposed rule. Also, the rule should not require use in such exemption calculations of a default emission rate in Part 75 if a unit in fact has a lower NOx emission limit in its permit. The following specifics may help illustrate this comment.

As DEQ knows, the Big Island Mill's No.6 boiler is a natural gas-fired boiler with diesel fuel backup capability. The boiler is equipped with low NOx burners and flue gas

recirculation. When the unit was constructed and started up in 1996, the Mill took a BACT emission limit of 0.0315 lbs NOx/MMBtu and a heat input limit of 284.9 MMBtu/hr.. Even though the permit has no express restrictions an operating hours designed specifically to limit ozone season emissions, the 0.0315 lbs./MMBtu limit, coupled with the heat input limit, serves as an effective, enforceable limit on total ozone season NOx emissions. That is, the unit's total ozone season emissions are limited to the total permitted seasonal heat input values (1,046,153 MMBtu) times the unit's federally-enforceable permit limit (0.0315 lbs./MMBtu). Converted into tons, the No.6 boiler has an effective, enforceable ozone season NOx limit of 16.5 tons, well under the 25 ton exemption level (our calculations are in the attached spreadsheet). These limits should allow exclusion of this unit from the rule, even without the specific sorts of operating hour limits required in the current draft rule.

**RESPONSE**: The 25 ton exemption provisions adopted for approvability issues as required by EPA do not exempt units from the entire rule, but exempt those units from requirements of monitoring with CEMs as required in 40 CFR Part 75. Any deviations from this provision are not acceptable to EPA.

No changes have been made to the proposal based on this comment.

217. **SUBJECT:** Unit allocation for facility

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

TEXT: Even if DEQ does not modify the 25-ton exempt provision to allow exclusion of our No. 6 boiler, the DEQ should re-calculate the initial NOx allowance for this unit. The current version of the proposed rule lists the NOx allowance for our No.6 boiler as only 2 tons. We do not understand how this number was derived. By the same general reasoning presented in our prior comment, G-P believes that it should be entitled to an initial allowance of 16.5 tons/season. This is derived by multiplying the unit's permitted seasonal heat input level by the unit's actual NOx limit of 0.0315 lbs/MMBtu. This is an enforceable, effective BACT limit. The mill should not be assigned allowances under the NOx SIP rule that in effect require further reductions substantially below its recent BACT limit.

**RESPONSE:** Please see response to comment #210.

218. **SUBJECT:** Unit allocation for facility

<u>COMMENTER</u>: Scott D. Matchett, Corporate Counsel Environmental, Georgia-Pacific Corporation Law Department, 133 Peachtree Street NE (30303-1847), P.O. Box 105605, Atlanta, Georgia 30348-5605

**TEXT**: If the DEQ determines that it (or EPA) is unwilling or unable to

allocate allowances based on permitted, BACT – level baseline heat inputs, G-P requests that DEQ at least correct the allowance for our No. 6 boiler to 9.3 tons. That number is calculated by multiplying our 1997/98 baseline heat input by the unit's permitted NOx emission limit of .0315 lbs/MMBTU, as prescribed by 9 VAC 5-140-420 C.1 as currently written.

**RESPONSE**: Please see responses to comments #201 and #217.

219. **SUBJECT**: Use of equipment

**COMMENTER:** Richard D. Langford, Regulatory Affairs Manager, Celanese Acetate, LLC., P.O. Box 1000, Narrows, VA 24124

**TEXT:** The Celco Plant generates all of the steam needed for production operations using large coal-, oil-, and natural gas-fired industrial boilers. The two boilers that would be subject to the proposed regulations are two of the Celco Plant's largest boilers. Because of the economics of energy and steam production, it is vital to the Celco Plant that these two boilers be available, to the maximum extent possible, for the generation of plant steam and electricity. It is critical to the Celco Plant that the proposed regulations do not unduly restrict the Company's ability to utilize these boilers.

**RESPONSE**: The proposed regulation doesn't restrict the use of any equipment, but rather, provides allowances (tons of NOx) to sources during a control period. If a sources emissions at the end of the control period are greater that the amount of allowances issues, the source must provide additional allowances to cover the difference. Those allowances can either be banked allowances or the source can purchase additional allowances from the marketplace.

No changes have been made to the proposal based on this comment.

220. **SUBJECT**: Unit allocation for facility

**COMMENTER:** Richard D. Langford, Regulatory Affairs Manager, Celanese Acetate, LLC., P.O. Box 1000, Narrows, VA 24124

TEXT: The proposed regulations set unit-by-unit initial NOx allocations for regulated units in Virginia, including the two Celco boilers. Celanese believes the NOx allocation for Celco's No. 8 boiler, identified in the rule as "point id" 002, is too low and would severely hamper the Company's ability to utilize this boiler. The proposed regulations set the initial NOx allocation for the No. 8 boiler at 20 tons per "control period," i.e. five month ozone season, except in the first year of the program. In contrast, the U.S. Environmental Protection Agency ("EPA") set the initial NOx allocation for this boiler under the federal CAA) 126 NOx budget trading rule at 56 tons per control period. See 40 CFR Part 97, App. B (point ID 014). The NOx allocation for Celco's No. 8 boiler in Virginia's proposed regulations is less than half the EPA's allocation.

**RESPONSE**: The methodology described in response to comment #201 is more consistent with the Section 126 rule, 40 CFR Part 97.

221. **SUBJECT**: Separate State Trading Budget Calculation from Allocation

**COMMENTER:** Richard D. Langford, Regulatory Affairs Manager, Celanese Acetate, LLC., P.O. Box 1000, Narrows, VA 24124

**TEXT:** Celanese believes the difference in allocations is caused by a difference in the way allocations were set between the state and federal rules. EPA used a two step approach to setting initial allocations. First, EPA used available data to determine the state's overall trading budget for nonEGUs. This was the sum of the individual units baseline emissions adjusted for growth factors and a 60% level of control. This total was then allocated to individual sources on a pro-rata basis using heat input, with each source getting their proportionate share of the allocation based on it's share of the total heat input.

From discussions with DEQ staff, and the preamble to the proposed regulations, we understand that DEQ used a single step approach. DEQ has calculated both the total state trading budget for nonEGUs and the initial allocations in one step. This process results in the initial allocation basis using a different methodology than what will be used for subsequent allocation periods. This is a major inconsistency in the allocation process. DEQ should separate the calculation of a revised state trading budget for nonEGUs from the allocation process.

**RESPONSE**: Please see response to comment #201.

222. **SUBJECT**: Allocate Based on Proportionate Share of Heat Input

**COMMENTER:** Richard D. Langford, Regulatory Affairs Manager, Celanese Acetate, LLC., P.O. Box 1000, Narrows, VA 24124

**TEXT:** We understand from the preamble to the proposed regulations that the method the Department used to calculate the revised non-EGU trading budget and the initial NOx allocations employed different types of inputs for different nonEGUs. Some calculations were based on past actual heat input while others were based on past actual emission rates for the regulated units. While this is an acceptable method to calculate a state budget, it should not be used for allocating allowances. If used for making initial allocations, there will be a significant inconsistency since this is not the method used to apportion allocations in subsequent allocation periods.

For the sake of consistency, Celanese believes the same methodology should be used for both initial allocations and subsequent allocations. Allocations should be based on a source's pro-rata share of heat input, not past emission rates or some other factor. During the development of its NOx SIP all for the states, EPA considered arguments

that NOx allowance allocations for EGUs should be based something other than heat input. In its final NOxSIP call model rules, 40 CFR Part 96, and its own NOx budget trading regulations, 40 CFR Part 97, EPA opted to use heat input as the basis for calculating allocations. Celanese believes Virginia should follow EPA's lead in this regard and adopt an allocation methodology for both initial and subsequent allocations based on heat input. Therefore, we advocate adopting a consistent allocation methodology basing the initial and subsequent allocations for nonEGUs exclusively on the basis of proportionate share of heat input data.

**RESPONSE:** Please see response to comment #201.

223. **SUBJECT:** Use of Maximum vs. Actual Data

**COMMENTER:** Richard D. Langford, Regulatory Affairs Manager, Celanese Acetate, LLC., P.O. Box 1000, Narrows, VA 24124

<u>TEXT</u>: Celanese believes that if it is not possible for allocations for all regulated non-EGUs to be based on past actual heat input rate, then the allocation for all nonEGUs should be based on the units' maximum heat input capacity. Such an allocation scheme would distribute NOx emission allowances to units based on the potential for the units to generate steam. This is a fair and economically efficient allocation method because it mirrors the investment source owners have made in their boilers.

In sum, if allocating all NOx allowances to non-EGUs on the same basis -past actual heat input rates is not feasible, then the allowances should be allocated on the basis of the maximum heat input capacities of the regulated units.

**RESPONSE:** Please see response to comment #42 and #201.

224. **SUBJECT**: Base Period for Initial Allocation

**COMMENTER:** Richard D. Langford, Regulatory Affairs Manager, Celanese Acetate, LLC., P.O. Box 1000, Narrows, VA 24124

TEXT: Allocations should be based on the average heat input for the two highest years in the prior five-year period. Celanese advocates the approach taken generally in the proposed regulations, i.e., determining the NOx allowance allocations based on the average heat input for the two highest in the past five years. However, we note the DEQ did not actually employ this method for the initial allocations. Instead, the DEQ used heat input data, where available, for the four-year period from 1995 through 1998 to calculate the initial EGU and non-EGU allocations. Celanese advocates using a full five years of heat input data for calculating the initial allocations. We recommend that the initial allocation method specify that heat input data from the years 1995 through 1999 be used to set the initial allocations.

**RESPONSE**: Please see response to comment #42 and #201.

225. **SUBJECT**: Support VMA comments

**COMMENTER:** Richard D. Langford, Regulatory Affairs Manager, Celanese Acetate, LLC., P.O. Box 1000, Narrows, VA 24124

**TEXT:** Celanese is a member of the Virginia Manufacturers Association ("VMA"). The VMA is submitting comments on the proposed regulations on behalf of Celanese and the VMA's other members. Celanese strongly endorses those comments and urges the Department and the Air Board to make the changes to the proposed regulations advocated by the VMA in those comments.

**RESPONSE**: Please see responses to comments submitted by VMA, #97-#114.

226. **SUBJECT:** Harmonize with federal Section 126 Rule

**COMMENTER:** Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** In general, International Paper supports the DEQ in its current plan to harmonize the proposed rulemaking with EPA's Part 97, and adopt EPA's EGU, non-EGU and compliance supplement pool budgets in order to ensure EPA approval of the state program and avoid sanctions. NOx budget units in the state will be subject to EPA's Part 97 rule until the compliance date in the state rule. As such, affected units will operate for one full ozone season and one month of a second ozone season under the federal rules, only to transition, on May 31, 2004, to the state regulatory framework. If the state rule does not harmonize with EPA's rule, the transition date will be chaotic, and the likelihood for inadvertent non-compliance high. This problem can be avoided by adopting key provisions of Part 97:

- a. Reference EPA EGU, nonEGU and compliance supplement pool budgetsb. Adopt the Part 97 definition of "fossil fuel fired" and the applicability criteria in Part 97.4
- c. Adopt EPA's initial NOx allowance allocation procedures from Part 97.42 and move the numerical allocation tables outside of the regulation.

**RESPONSE**: Support for the proposal is appreciated, and items a through c are acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

227. **SUBJECT:** Initial Allocation

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

TEXT: The basis for the initial allocation is not specified in the rulemaking. At a minimum, affected sources should be provided with the allocation basis and unit-specific calculations and offered an opportunity for comment. International Paper operates four units that meet the definition of NOx budget unit under the proposed rule. Only one of these units is listed on the table in 9 VAC 5-140-950. It is unclear how the 71 ton allocation in the table was calculated, and why the other three units at the mill are not listed. But as the regulation is currently written, we have no recourse but to buy allocations for the three unlisted units for the first 10 years of the program, at an estimated cost of \$2 million per year, compared to a cost under the Federal rule of \$450,000 per year. International Paper has provided the DEQ with the baseline heat input data needed to calculate allocations for the additional three sources, and requests that DEQ adjust non-EGU allocations to include these budget units. This could be achieved by including the initial allocation basis in the regulation in place of the current table of allocations, and initiating an effort outside the regulation to correct the actual allocation amounts.

The following International Paper nonEGU's need to be included in the allocations: No. 6 Power Boiler, No. 7 Power Boiler, No. 8 Power Boiler, and 910 Gas Turbine System/HRSG. Currently, only No. 8 Power Boiler is listed on the table in 9VAC 5-140-950. Attachment I shows a February 22, 1999 letter from International Paper to EPA and John Daniel - DEQ, this letter shows #6, 7 Power Boiler and 910 Gas Turbine/HRSG need to be added to the state emissions inventory. In this letter, we requested removal of #8 Power Boiler from the inventory due to plans to derate the boiler to be less than 250 mmbtu/hr in response to an NOV. Attachment II is a copy of an email from Jim McGrath - International Paper to Tom Ballou - DEQ dated October 17, 2000. This DEQ proposed list of emission inventory units shows #6 & 7 Power Boilers were correctly on the list and #8 Power Boiler was off the list, as we requested in the February 1999 letter to DEQ. This October 17, 2000 email requested the addition of #8 Power Boiler back on the list, since resolution of the NOV did not lead us to derate the boiler. As of October 17, 2000, International Paper assumed the DEQ emissions inventory contained #6, 7, 8 Power Boilers and 910 Gas Turbine/HRSG. International Paper's data indicates that #6 & 7 Power Boiler cannot be exempted for fossil fuel fired state definition using the 1995 - 98 baseline year, and therefore we do not understand why they were removed from the DEQ emissions inventory.

Attachment III shows a memo from International Paper to EPA dated Jan. 29, 2001 copying DEQ (John Daniel and Tom Ballou) requesting #7 Power Boiler be removed from the Federal Emissions Inventory because the boiler did not meet the definition of "fossil fuel fired" for the 1995 baseline year. EPA granted us this exemption on August 1, 2001 as shown letter in Attachment IV. Tables in Attachments V-VIII show the annual heat input data and corresponding fossil fuel firing percentages based on heat input for #6 Power Boiler. Similar data for #7 Power Boiler is shown in Attachment IX-XII. These tables show that #6&7 Power Boilers do not meet the fossil fuel fired exemption for each of the four required baseline years (1995-1998), but do for only a portion of the required four years.

The state's proposed rules using 1995 – 98 baseline years for heat input for fossil fuel fired exemption are different from EPA's baseline years for heat input. For our #7 Power Boiler, this means it is excluded under Federal Rules but not excluded from proposed state rules for fossil fuel fired exemptions. This makes it impossible for permittees like us to plan and get funds approved for CEMS installation and NOX control restrictions by the deadlines required in the regulations.

International Paper requests correction of the emissions inventory as we have stated above and is shown in Attachment XIII.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal. The inconsistency between the definitions of "fossil fuel fired" in the state and federal regulation had been resolved by adopting the federal definition. The historical heat input data provided by the company has been used for determining allocations for affected units.

228. **SUBJECT:** Subsequent allocations

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** The proposed rule provides for an annual reallocation with a 10 year look-ahead. This is unnecessarily burdensome on the DEQ, and should be replaced with a 5-year block reallocation, calculated once every 5 years, with a 5-year look ahead. This is consistent with EPA's approach in Part 97; with a 5-year look ahead rather than the 3-year period in Part 97 to provide sources with an adequate planning window.

**RESPONSE**: Please see response to comment #39.

229. SUBJECT: Allocation timeframe

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** The proposal has the initial allocation period of ten years. The legislation mandates a five-year initial allocation period for EGU sources only. This creates a two-tier allocation system; five years for EGUs, ten years for nonEGUs. Should the Board strive to achieve a simplified regulatory program by having all sources, both EGU and non-EGU, subject to the same allocation timeframes or should different regulatory allocation timeframes be crafted for the two sectors?

A- Have all sources subject to the same allocation timeframe.

**RESPONSE**: Please see response to comments #34 and #39.

230. **SUBJECT**: NonEGU set aside

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** Should a set-aside be created for non-EGU sources? If so, should it also be five percent for the first five years, two percent for every year thereafter as specified in the legislation for EGUs, or something different?

A- A small new source set-aside may be appropriate for nonEGUs, but a two- percent annual set aside should be sufficient to allow for growth.

**RESPONSE**: Please see response to comments #34 and #36.

231. **SUBJECT**: Separate source category set asides

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT**: Should the set-aside mandated by legislation be taken from the entire state budget or only from the EGU sector budget?

Each set-aside should come from its respective sector, and unused allocations should be distributed back to the existing sources in that sector.

**RESPONSE:** Please see response to comment #36.

232. **SUBJECT:** Distribution of set aside

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** How should the set-aside be distributed: on a first come, first serve basis; distributed equally to all requesting a portion of the set-aside; auction; or some other method?

The set aside should be distributed equally to all requesting a portion of the set-aside as described in 97.42(d).

**RESPONSE:** Please see response to comment #32.

233. **SUBJECT:** Definition of "new generating facility"

**COMMENTER:** Sheryl S. Raulston, Environmental Affairs Manager,

International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** How should the term "new generating facilities" referenced in the legislation be defined, i.e. who is eligible for the set-aside? Is the set-aside available to all sources that didn't receive an initial allocation? Is the set-aside only for sources that receive a first-time permit in that calendar year? Should the set-aside be made available only when a source actually begins to operate?

The set-aside should be made available to all sources that didn't receive an allocation for that year. The allocation should only be made if a source actually begins to operate. At the end of the ozone season, the allocation should be adjusted to ensure it provides no more than the number of allocations needed to offset actual emissions for each source in the set-aside. Unused allocations from the set-aside should be redistributed among existing NOx Budget units.

**RESPONSE**: Please see response to comment #38.

234. **SUBJECT:** Subsequent allocations

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** Should subsequent allocations be computed annually, or should the timeframe be greater? If greater, how much greater, and why?

Subsequent allocations should be calculated every five years, in five year blocks, for the five-year period starting five years after the year in which the calculation is made. If the DEQ is calculating emissions based on the two highest heat inputs out of the past five years, it makes sense for the allocation to also be for a five-year period. Otherwise the DEQ will be recalculating allocations using the same high heat input years several years in a row. Allocating in a block also facilitates the sources' planning process by making future years' allocations known ahead of time.

**RESPONSE**: Please see response to comment #39.

235. **SUBJECT:** State budget

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** The proposed regulation identifies all sources and units within those sources that receive an initial allocation and provides a NOx allocation for each unit. If EPA modifies the emissions budget in response to the court decision after the effective date of the final Virginia regulation, any changes to bring the individual unit allocations in the regulation in line with the new EPA emissions budget would require the Department to initiate a new regulatory action under the Administrative Process Act.

Adopt the EPA EGU, nonEGU and compliance supplement pool budgets by reference. Remove the allocation tables from the regulation and instead provide the allocation calculation methodology found in Part 97.42 of the federal rule. The allocation table and underlying calculations should be made available to the affected sources for comment prior to finalization.

**RESPONSE**: Please see response to comments #1 and #39.

236. **SUBJECT**: EGU and nonEGU budgets

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** Should the Board accept the EPA comment which requires the EGU and nonEGU budgets be lowered to meet the EPA budgets listed in the federal regulations? If so, how should the budgets be reduced?

Yes. The state budgets must match the EPA budgets in order to receive EPA approval of the program and avoid sanctions. In addition, the non-EGU budget will need to be increased to the federal level to accommodate the International Paper units, which were left out of the state allocation process.

**RESPONSE:** Please see response to comment #1.

237. **SUBJECT**: Incorporate all EPA comments

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** The EPA also made comments of a general nature intended to improve the regulation but would not impact the approval of the SIP submittal. Should the Board accept any of these comments? If so, which ones?

The Board should accept all of EPA's recommendations for improving the Virginia regulation; particularly those aimed at consistency with the federal Part 97 rule. Part 97 contains many improvements over the earlier Part 96 model rule, and represents an improved model. Also, since sources in Virginia will be subject to Part 97 before the state regulation becomes effective, harmonizing the two rules is critical to the success of the program, particularly in the ozone season in which the transition between the two programs occurs.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

238. **SUBJECT:** Supports department preferences

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** Department preferences on issues:

- a. The state regulation should incorporate the EPA emissions budget and compliance supplement pool by reference, thus avoiding the necessity of revising the regulation should EPA revise its emissions budget or compliance supplement pool. Agree.
- b. In order to accommodate the changes described in paragraph a above, the state regulation should not include the initial allocations for individual units. The initial and subsequent allocations would be accomplished outside of the regulatory process. Agree. Instead, the regulation should describe the allocation methodology and baseline.
- c. The state regulation (which is based on 40 CFR Part 96) should incorporate the changes recommended by EPA to make it consistent with 40 CFR Part 97. Agree. Also incorporate the definition of fossil fuel fired from 97.2, the applicability criteria from 97.4 and the initial allocation methodology from 97.42.
- d. The methodology in 40 CFR 97, amended to accommodate the new state legislation (Chapter 580) should be used to distribute the new source set-aside. –Agree.
- e. The regulation should include a new source set-aside for nonEGU consistent with that required by state law for EGUs. Each set-aside should come from the emissions budget for that source category. –Agree, although a 2% set-aside annually should be sufficient for nonEGUs.
- f. The state regulation should provide for a single system for the initial allocation period and distribution of the new source set-asides for both EGUs and non-EGUs. —Agree.

**RESPONSE:** Please see response to comments #1, #34, #36, #37, and #41.

239. **SUBJECT:** 9 VAC 5-140-20

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** The definition of "fossil fuel-fired" differs from EPA's definition, causing sources to move in and out of the NOx Budget Trading program when it transitions from the EPA to the state rule in 2004.

Recommendation: Adopt the Part 97 definition of "fossil fuel-fired."

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

240. **SUBJECT:** Definition of "most stringent state or federal NOx emission limitation"

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** The definition of "most stringent state or federal NOx emission limitation" includes any limit "regardless of the averaging period to which the emission limit applies." It would be inappropriate to compare an annualized limit such as a tons per year PSD avoidance limit to a limit on emissions in pound per mmBtu during the ozone season. This definition should only include short-term limitations such as pound per million Btu or part per million.

Recommendation: Delete the phrase "regardless of the averaging period to which the emission limit applies" in the definition of "most stringent state or federal NOx emission limitation."

**RESPONSE**: The definition is derived from 40 CFR part 97 and is consistent with federal requirements. The term already requires the limit to be expressed in pounds per million BTU.

No changes have been made to the proposal based on this comment.

241. **SUBJECT:** 9 VAC 5-140-40

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** The applicability criteria in 140-40 A 1 subjects any generator selling any amount of electricity to EGU standards, and could cause an existing non-EGU to require allocations out of the EGU budget simply due to incremental electricity sales.

Recommendation: Adopt EPA's applicability criteria in 97.4(a)(1), which was modified from the Part 96 language to only encompass true EGUs.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

242. **SUBJECT:** 9 VAC 5-140-50

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** International Paper supports the Retired Unit Exemption

Recommendation: Retain section 140-50 in the regulation.

**RESPONSE**: Support for the proposal is appreciated. Section 140-50 in the regulation will be retained.

No changes have been made to the proposal based on this comment.

243. **SUBJECT:** 9 VAC 5-140-410A

**COMMENTER:** Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** This section references an allocation table, which is missing three of International Paper's four affected units. It also contains a clause stating that any unit not listed in that table will need to purchase allocations from the market. This unfairly penalizes International Paper for the Department's error, at a cost to the company of \$2 million per year for ten years.

Recommendation: Replace this paragraph with a description of the allocation methodology and baseline period (see 97.42). Publish the allocation table and underlying calculations separate from the regulation and allow affected sources an opportunity to comment on the table before the allocations are finalized. Change the initial allocation period to five years, consistent with the EGU allocation required by legislation.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

244. **SUBJECT:** 9 VAC 5-140--410B

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** Changes in allocations will not be made for a period of ten years. A new unit coming on line, an increase in utilization of an existing unit, or a decrease in use of an existing unit will not receive allocations (or a corresponding change in allocations) for ten years after the change is made. This is too long. Also, the annual reallocation is unnecessarily burdensome on Department staff.

Recommendation: Change the first sentence to "By April 1, 2004 and April 1 of every fifth year thereafter, the permitting authority shall submit to the administrator the NOx allowance allocations, in accordance with 9 VAC 5-140-420, for the control periods in the years that are five through nine years after the year of the applicable April 1

deadline for submission."

**RESPONSE**: Please see response to comment #39.

245. **SUBJECT**: 9 VAC 5-140-420A2

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** This helpful provision is provided for EGUs with less than two control periods of heat input. It should be allowed for non-EGUs as well.

Recommendation: Change the citation from 9-VAC-5-140-40 A 1 to 9-VAC-5-140-40 A.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

246. **SUBJECT**: 9 VAC 5-140-430

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

<u>TEXT</u>: This section contains many deadlines that have already passed, or which will have passed by the time the rule is final.

Recommendation: Change all 2001 deadlines in this section to 2002. Also change the reference in 140-700 B 1 from May 1, 2001 to May 1, 2002.

**RESPONSE**: Some deadlines cannot be changed and have the regulation meet federal requirements. To the extent allowable and practical, some dates have been moved forward to 2002.

247. **SUBJECT:** 9 VAC 5-140-Article 10

<u>COMMENTER</u>: Sheryl S. Raulston, Environmental Affairs Manager, International Paper, 34040 Camp Drive, Franklin, VA 23851

**TEXT:** Issue: This Article contains budgets that will cause EPA to reject the Virginia SIP submittal. The allocation tables in this article contain information that may be subject to change and would be more effectively handled outside of the regulation itself.

Recommendation: Delete Article 10 from the rule. Incorporate EPA's budget by reference. Correct the non-EGU allocation table to include all International Paper affected units. Make the allocations table and the underlying calculations available to

affected sources for comment prior to finalization. Publish the allocations outside of the regulation.

**RESPONSE**: This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal.

The following comments were received during the public hearing, September 14, 2001. Where appropriate, the reference to a similar written comment is provided.

248. **SUBJECT**: Support for proposal

<u>COMMENTER</u>: Cynthia McLeod, Superintendent of Richmond National Battlefield Park, National Park Service (NPS)

**TEXT:** We are submitting comments due to concerns for the public health of the citizens visiting and working in the parks. Our concerns include the adverse impacts of NOx emissions and their transformation products, including ozone effects on sensitive vegetation, oxidized nitrogen contribution to acid and nutrient deposition, and gaseous and fine particle contribution to visible haze.

The NPS supports Virginia's preferred option of amending the October 2000 draft regulation. In order to have an approvable plan the state must adopt measures that meet the intent of the Environmental Protection Agency (EPA) NOx SIP Call as well as ones that meet the amended the legislation authorizing the development of Virginia's NOx control program. The NPS also believes that the Department of Environmental Quality's (DEQ) preferences regarding additional issues for public comment are reasonable and would serve to expedite approval and implementation of the program if adopted by the State Air Pollution Control Board (SAPCB).

Over the years the NPS has often voiced concerns about degraded air quality and air quality dependent resources of the park units we manage in and near the Commonwealth of Virginia. These concerns have not diminished, in fact have been increasing as we see more development activities planned in Virginia that bring more air pollution into our park areas. While we do support newer, cleaner facilities over older, more polluting ones, we have seen that new development tends to supplement rather than replace older, dirtier sources. The new NOx control program will benefit both local and regional air quality by substantially lowering the total amount of NOx allowed statewide. We support that proposal.

**RESPONSE**: Support for the proposal is appreciated.

## 249 **SUBJECT:** Additional measures

<u>COMMENTER</u>: Cynthia McLeod, Superintendent of Richmond National Battlefield Park, National Park Service (NPS)

**TEXT:** We also strongly encourage Virginia to consider the additional two measures:

1. Mechanism for redistribution of individual unit's emissions allocation.

To keep the balance of Virginia's budget on target, it will likely be necessary to redistribute individual unit allocations as existing sources that are currently exempt grow large enough to qualify for program inclusion.

2. Set-a-side for environmental benefit.

Virginia should consider creating a separate set-a-side for additional environmental benefit out of its total NOx emissions budget that is on the order of that for new NOx sources-5%-and would be available to offset growth and emissions from non program sources.

**RESPONSE:** Allocations will be updated through subsequent allocations in five-year blocks. Please see response to comment #39. The issue of an environmental set aside is addressed in response to comment #32.

250. **SUBJECT**: Program equality

**COMMENTER:** Greg Kunkel, Tenasko

**TEXT:** We are an Independent Power Producer (IPP) based in Omaha, Nebraska with two major projects under development in Virginia. We are what would be considered a new source along with a variety of others, IPP generators, essentially sellers of wholesale electricity in the developing deregulated wholesale electricity market.

This particular regulation finds us at a point in history where the electricity markets are changing radically. There are new things happening; the way we produce electricity to the way we purchase it. Arrangements for electricity are changing, moving from a regulated monopolistic style to a competitive wholesale market, which exists today, and possibly future deregulation at the retail level. All this is very important with respect to the legislature's intent with respect to this particular rulemaking which is "don't mess-up the competitive aspects that we are trying to develop in this marketplace."

If you think about \$6,000.00 per allowance as being the current price for allowances, some 20,000 to 22,000 allowances being distributed through this program, the equity of that distribution is obviously a key factor in competitive relationships among the electric

generating industry.

Our main theme, really our only theme is, whatever rules Virginia would choose, that everyone in this electric market be treated exactly the same. What is good for A is good B is good for C whether they were built in 1940, 1980, or 2010 or 2030 in the future, that all of these units should play by the same rules, exactly the same rules. The draft rule doesn't accomplish that.

We have some specific suggestions about how to make it equal and also specific responses to some of the issues raised by the agency. Our recommendations are aimed at ultimately providing absolutely equal treatment to all participants in this industry and it shouldn't be that hard to do. We recognize that there is this initial allocation period where the legislature has set a 5% set-a-side for new sources. From my side of the table this looks like a 95% set-a-side for baseline [existing] sources which already throws some questions about equity, but, its actually a livable situation for the new sources because our environmental performance is so superior to baseline sources.

**RESPONSE:** Air quality programs have never been equal for sources built in 1940, 1980, or 2010 or 2030. In fact, federal Clean Air Act mandates that new sources be treated differently than existing sources. New sources have ALWAYS been required to "play by a different set of rules"; its called Best Available Control Technology (BACT).

This program establishes a state budget-a budget based upon the previous emissions of existing sources that currently operate in Virginia. To make the statement that 95 percent of the budget allocated to existing sources "already throws some questions about equity" [about the program] is indeed a perverse view about the program, including what this program is attempting to accomplish. i.e. emission reductions at the least cost. By the commenter's own admission new sources should not receive the same number of allocations as existing sources because "our [new sources] environmental performance is so superior to baseline sources." This is true, which is why it is appropriate to NOT allocate to new sources at the same emission rate that is used for existing sources. Please see responses to comment #43.

251. **SUBJECT:** Size of EGU set aside

**COMMENTER:** Greg Kunkel, Tenasko

**TEXT:** There should be a new source set-a-side that is sufficient for anticipated new generation in Virginia. And, in compliance with the legislative intent, extend for the first five years of the program; five percent of the budget for each of those years and then two percent for each year thereafter. Based on the anticipated number of new sources, that set-a-side as mandated by Virginia is likely to be insufficient to cover all the new sources on the same basis--the 0.15lbs/mmBtu of heat input or the core emissions rate basis--its unlikely to be sufficient to treat the new

sources on the same basis as the sources that happen to be operating during the baseline period. Something has to be done about that.

For the new sources and the new source allocation, we suggest a simple set of rules. For one thing, who is in the program could be limited to those units that achieve commercial operation, as defined under the Acid Rain Program rules, i.e. connected to the grid, producing electricity, by the first day of the compliance period of any given year.

**RESPONSE:** This comment is acceptable and appropriate changes reflecting the intent of the comment have been made to the proposal, however, the size of the new source set aside is set in law. Please see responses to comments # 36, #37 and #38.

252. **SUBJECT**: Distribution of new source set aside

**COMMENTER:** Greg Kunkel, Tenasko

**TEXT:** Allocations should be based on that core emissions rate. There should be only one basis, it should be the same basis for everyone, and it should be that core rate that was the basis for establishing the budget in EPA's work. To make that work for the new sources, and projecting their emissions, we could use their maximum design heat input, and a compacity factor of lets say 25% for simple cycle units during the summer and 80% for combined cycle or all utility steam electric generating units.

**RESPONSE**: Please see response to comment #37.

No changes have been made to the proposal based on this comment.

253. **SUBJECT:** Distribution of new source set aside

**COMMENTER:** Greg Kunkel, Tenasko

**TEXT:** We could allocate among new sources not on a first-come-first-serve basis but on a pro rata basis. At least among the new sources, whom are splitting this five percent, we are not saying; "O.K. you get what you need and you get nothing" but that everybody divides the pool on an equal basis, no matter who is there, but anybody who is operating on that first day of the season.

**RESPONSE**: Please see response to comment #37.

254. **SUBJECT:** Equal Treatment

**COMMENTER:** Greg Kunkel, Tenasko

**TEXT:** These are all common sense things to us that get us toward a position where we have equal treatment. After the 2004 compliance period, we suggest that DEQ reallocate allowances among all sources operating during that season on an equal 0.15lbs/mmBtu basis for the 2009 compliance season, that is five years in advance. Every year after that do exactly the same thing. Annual reallocation, five years in advance, starting after the 2004 data is available for operations in 2004. Heat input data is going to be available, but it takes time to process. You could use the heat input data that is the highest two years of the previous five as is common in other states. Sources with only a single year of operation should not be excluded for the allocation. If they had only one year of data then you would use only that one year. If they are operating, they are part of the pool, they are contributing to society and they should have an equal participation.

**RESPONSE**: Please see responses to comments, #37, #38, #39, #42, #43, and #44.

255. **SUBJECT:** Comments to agency questions posed in the public hearing notice

**COMMENTER:** Greg Kunkel, Tenasko

**TEXT:** The following are specific responses to some of the issues raised by the agency:

The rules do not need to be the same for electric generating units (EGUs) and nonelectrical generating units (nonEGUs). There are many factors that account for the unique situation that is happening in the electric industry with a suite of new players getting involved, rapid growth in the industry, and rapid change. Whereas these factors may not apply in the nonEGU sector.

Should there be a new source set-a-side for nonEGU sources. We look to the nonEGU sources for comment.

The EGU budget as opposed to the statewide budget should be adequate for the set-a-side. On the other hand, DEQ may wish to consider the erroneous listings, and therefore amounts of budget, that were erroneously added to the Virginia budget from sources that ultimately were, the state has concluded, not going to be included in the program i.e. smaller than 250 mmBtu, of heat input or not burning fossil fuel. These budget amounts could be used for this purpose or for the concept of a public benefit program. There might be a little something to be used for a renewable set-a-side. We would also support this concept.

The set-a-side should be distributed to new sources that have achieved commercial operation by the first day of the compliance period utilizing the core emission rate maximum design heat rate and appropriate capacity factors. If you use the appropriate capacity factor, new sources would not need to surrender any allowances at the end of

the season.

The definition for "new generating facility" should use the definition of "commercial operation" in the Acid Rain Program. One then needs to establish the date of commercial operation. We are suggesting that, if the new source reaches commercial operation by the first day of the compliance period in question, then they are in.

Subsequent allocations, because of the rapid change in the market, the addition of new plants and new capacity, the changes that occur every year at many plants and modifications, the allocation should be annually to adjust for all of these changes. Starting in 2004, the allocations should be five years in advance, with everyone treated exactly the same.

The draft rule proposes that the more stringent permit limit be used instead of the core emission rate of 0.15lb/mmBtu. In a state where the major utility is in negotiation over new source violations where they have avoided getting new permits, that type of approach is clearly, clearly invalid. When you have permits issued over a long period of time and many permits that have failed to have been issued when they should have been, perhaps, or so the investigations would suggest, granting allocations based on those old permits while forcing new facilities to get allowances based on their new permit limits is invalid. Therefore, we really reject that type of approach.

**RESPONSE**: All of these issues were addressed in the responses to the written comments submitted by Tenasko. Please see responses to comments #155-#167.

256. **SUBJECT**: Intent to submit written comments

**COMMENTER:** Beth Barfield, Virginia Independent Power Producers

**TEXT:** We do intend to file comments and propose substantial changes. Specifically, they will be changes necessary for the regulation to meet the new language of the General Assembly legislation.

**RESPONSE**: Please see responses to comments submitted by the Virginia Independent Power Producers, #142-#154.

257. **SUBJECT:** Intent to submit written comments

**COMMENTER:** Tom Knauer, Virginia Manufacturers Association (VMA)

**TEXT:** VMA participated in the ad hoc advisory group that assisted DEQ in drafting the regulation proposed by the SAPCB. VMA generally supports the proposed regulations because they represent the careful crafted census of the advisory group. However, as a result of statutory mandates by the General Assembly, several of the proposed regulations dealing with EGUs must be changed. These mandated

changes to the EGUs have raised questions concerning whether similar changes should be made to the regulations governing the nonEGU units, i.e. industrial units. DEQ has articulated these and other issues in the public notice published in the Virginia Register.

VMA is reviewing the mandated changes and other potential changes to the regulations and we will be providing extensive detailed comments before the close of the comment period.

**RESPONSE**: Please see response to written comments submitted by VMA, #97-#114.

258. **SUBJECT**: Local impacts due to trading

**COMMENTER:** Mary Hill, Prince William County Board of Supervisors

**TEXT:** I appreciate the opportunity to testify. I have served on the Board since 1996. I also serve as Vice Chairman of Metropolitan Washington Council of Governments (COG). I serve on the Air Quality Committee of COG. Washington D.C faces the possible exceedance of the NOx emissions from mobile sources in 2005.

I am here on behalf of the Prince William County Board of Supervisors to express our concern with one facet of the proposed regulation that could impact air quality in our metropolitan area and seek the SAPCB support in changing the program or its side-bar rules. The proposed program would facilitate the transfer or sale of certain point source NOx emissions credits in the Commonwealth and with entities in 21 other states and the District of Columbia. The sources that would be eligible are mainly power plants and heavy industry.

This program is modeled after the highly successful Acid Rain Reduction Program and we understand that the EPA is in favor of such a program to reduce NOx emissions and to improve the health of people living along the eastern seaboard. These are very worthy public policy goals which we do support. The challenge we would face from the proposed program is the possibility of eligible point sources upwind from the Washington Metropolitan Area acquiring NOx credits from downwind areas and putting more NOx emissions into our region's air. This possibility could occur while meeting the state's point source NOx budget.

We are concerned that several power plants or other heavy industrial users could locate on the fringes of the D.C. Metropolitan Area, outside of the nonattainment zone, and legally emit NOx emissions. These additional emissions could flow into our nonattainment area negating our efforts to reduce air pollution. In fact, "but for transport", which has become a key phrase of many of the law suits filed across the country, we are one of the areas that meets our requirements, and yet "but for transport", and that is the thing that is having an impact on us and we are very concerned about the transport issue. In plain language, this could also potentially

negatively impact the air quality for the Metropolitan D.C. Area and we would then face the possibly of even more stringent emissions budgets. That is a heavy burden for us with the transportation problems that we face in the Washington D.C. Area.

We believe our concerns could be allayed by the adoption of a rule whether as part of the program or as a side-bar rule requiring determination as to whether the additional emissions from transferred NOx credits would have negative impacts upon the nonattainment areas such as the Washington Metropolitan Area. These impacts could then be considered by the SAPCB and its determination as to whether to approve or deny specific trades. Adoption of such a rule would help both the Metropolitan Washington Area and the Commonwealth of Virginia in assuring clean and health air for all of its citizens.

I would just add, as an after thought here, that through our discussions at COG, there is concern about more stringent requirements when we go to the 8-hour standard. There will be many new nonattainment areas created as well as the expansion of existing ones. For credits given to entities locating on the fringes of a nonattainment area, those fringe areas could very well find themselves within a nonattainment area when the new 8-hour standard is implemented and we all have to comply with that. That would be another very negative feature.

Thank you for the opportunity to present this testimony. I regret and hope no offence is taken by this. I appreciate you being here, but obviously I could have submitted these. I drove a hundred miles to be here today. As an elected public official, we hold public hearings quite a bit. I really had expected, and the reason I drove so far rather than just submit these electronically, was that I hoped to address the Board personally. I hope this is not a common practice for them not to be at these hearings. I regret the opportunity of not being able to meet with them face to face.

**RESPONSE:** Please see response to comment #24.

259. **SUBJECT:** Allocations based on permit limit

**COMMENTER:** Andy Hight, Gordonsville Energy

**TEXT:** We have power purchase agreements with Dominion Power. We would like fair and equitable treatment with the NOx allocations. Our combined cycle units are some of the cleanest in the state and use the most modern technology available. We have been in operation since June of 1994. We do disagree with one item which is the allowance of 0.15 lbs/mmBtu or the units permitted NOx limit. We would just like to stay with the 0.15 lbs/mmBtu per 40 CFR Part 97.

We would like to work with in our permit limit. We are dispatched based on Dominion Power demands and we have no control over how much generation they may require at any given point in the year, particularly the ozone season. Gordonsville Energy, many other businesses like it, view the air permit as a critical and valuable part of our

business strategy. No one would build a plant until the permit limits are understood; but once that permit is issued, it is relied upon as a basis for valuable capital investment. We are very concerned about any regulatory changes that may have the effect of forcing us to have difficulty with meeting any contractual obligations.

At the recent EPA workshop, we were shocked and surprised to find out that we now have to comply with 40 Part 75 acid rain [monitoring] for that 5-month ozone period. That requires replacement of a new data acquisition system, possibly new stack analyzers. This has to be certified and installed by May 1, 2002, a full year ahead of the first ozone season.

This puts a burdensome and practical limit on us. We have contractors in now to try to meet this goal, but there are a lot of other sources out there competing for those resources.

**RESPONSE**: Gordensville Energy submitted written comments where similar issues were addressed. Please see responses to comments #70-#77. Also see response to comment #43 regarding allocations based on permit limits.

260. **SUBJECT:** Financial burden

**COMMENTER:** Andy Hight, Gordonsville Energy

**TEXT:** Regarding the allocations, being a non-utility generator, we have no mechanism to pass the cost of the NOx credits, such as Dominion Power has to pass the cost along to the consumer. This is an additional financial burden.

We will submit comments in writing by the September 14 deadline.

**RESPONSE**: Please see response to comment #77.

261. **SUBJECT:** Local impact due to trading

**COMMENTER:** Chris Miller, President, Piedmont Environmental Council

**TEXT:** Thank you for the opportunity to comment. I would join in the comment that it is unfortunate that no members of the SAPCB were here. We represent 3000 members in the Piedmont Area in Virginia.

The fact that no members of the SAPCB are here is disappointing. While I respect the staff's ability to summarize comments and present them to the Board, the richness of what you are hearing today is important for the Board members to absorb.

First, because the allowances are being traded statewide, there is a real possibility that there is a concentration of emissions on a geographic basis in some parts of the state. That could contribute to exceedances of the ozone NAAQS in certain "hot spots",

Northern Virginia, Richmond, Hampton. This is of particular concern because the language in your response to comments that there will no longer be an offset requirement for new sources. I don't know if that applies to existing nonattainment areas or just as a general matter.

The concern is that you can contribute to real ambient problems on the assumption that the global trading of the allowances is reducing transport. The comments provided thus far in the staff document really do not address that issue.

**RESPONSE**: Please see response to comment #24.

262. **SUBJECT:** Misunderstanding of purpose of program

**COMMENTER:** Chris Miller, President, Piedmont Environmental Council

**TEXT:** Second, the allowances are assigned on a seasonal basis. However, emissions can be concentrated as a matter of time as well as geographical location. During the ozone period it is a matter of several days per season of exceedances that contribute to or create the nonattainment status of Northern Virginia, Richmond and Hampton. The fact that your not making on allocation on a daily basis a "tonage/day" basis could contribute to exceedances of the ambient ozone standard and enormous costs to localities and the citizens who will have to make reduction in some other part of their lives-mostly mobile sources.

**RESPONSE**: The nature of the comment reflects a fundamental misunderstanding of the purpose of the regulation. Please see response to comment #21.

No changes have been made to the proposal based on this comment.

263. **SUBJECT**: Costs to localities

**COMMENTER:** Chris Miller, President, Piedmont Environmental Council

**TEXT:** Third, I'd like to make a statement about the staff analysis. There is this blanket statement that there are no particular costs assigned to any particular locality as a result of this rule. There is no description offered as to how that conclusion was reached. I would argue that there is a real possibility of enormous costs being allocated to certain localities in the state, particularly those ones in existing nonattainment areas for reasons stated above. I think that part of the record has to be amplified and a demonstration made by the staff as to why that is true. Or simply withdrawn and replaced by comments that do indicate that it is possible that certain localities may bear higher costs than others.

Furthermore, in evaluating costs its not sufficient to simply say the benefit of the rule will be lower cost to the regulated industry. There is no evaluation to the potential costs to

health impacts on agriculture/forestry activities in the state or on recreation and tourism. All three are very real cost centers for the state, both as a matter of public and private costs. And those are simply not evaluated in the staff document. The presumption that an overall reduction in NOx will contribute to improvement uniformly across the state is not defensible.

**RESPONSE**: The comment does not address the proposed regulation per se, but rather the agency background document. No specific recommendation has been made to the proposed regulatory language.

No changes have been made to the proposal based on this comment.

264. **SUBJECT**: Growth factors and air quality

**COMMENTER:** Chris Miller, President, Piedmont Environmental Council

**TEXT:** Final comments concern the growth factor. There is temptation to take the numbers presented by Dominion Resources, that we are going to have five percent growth in generation of power per year, and to use that as a trend and as the basis for the growth factor for existing EGUs or EGUs in general. However, there is no indication about where that five percent growth is allocated. That is not domestic use necessarily. Dominion Resources is already an exporter of power from the generating units located in Virginia to other users not in Virginia. So the presumption, as a matter of environmental regulation, that we will, as a state, have a rate of energy consumption that is far greater than population growth does two things: one, locks that state into the assumption that we are becoming increasingly energy inefficient. I hope that is not the position of DEQ. Second, it doesn't provide any alternative scenarios or strategies.

My recommendation would be that DEQ look at growth as a set of scenarios. One that assumes that current levels continue. Another which looks at various energy conservation strategies and other things that could reduce energy generation in Virginia.

The bottom line is that I don't think that DEQ should be issuing a rule that is based on the assumption that Virginia is a net exporter of power and that is good and to be balanced favorably against any other impacts. To the extent that we are dealing with persistent air quality problems in Virginia, our goal should not be to maximize production of energy as a commodity, but to properly balance the production of energy and other pollution causing activities with our environmental goals. I don't think the growth factor proposed by Dominion or the staff does either of those analyses. I would recommend that they do so.

We will be submitting additional written comments by the close of the comment period.

**RESPONSE:** Whether or not Virginia is a net importer or exporter of electricity is not the focus of the regulation. DEQ air permit writers do not make

decisions as to who will or won't operate in Virginia on any criteria other than impacts to the air quality. Even then, if a permit application is rejected do to modeled air quality violations, the source is free to resubmit another application with different pollution control criteria; for example, more restrictive operating parameters, fewer manufacturing lines, additional control strategies or different fuel use. As previously stated, economic development and corresponding new job growth is good for Virginia, and it can be accomplished without adverse impacts to the environment or public health.

The growth factors used in the proposal were generated from historic inventory numbers not Dominion Resource projections. That is, in fact, why EPA rejected the proposed state budget. DEQ used a different growth factor than EPA. The result was a much larger projected state budget.

As to our persistent air quality problems, there is currently one nonattainment area in Virginia. Several years ago there were three. The new eight-hour standard will, no doubt change that, however, under the current standard, the one used since the inception of the Clean Air Act, Virginia has demonstrated significant economic development and growth while improving overall air quality.

In 1991, statewide, the number of exceedances of the one-hour ozone standard was 20. Of those 20 exceedances, 14 occurred in Northern Virginia. This corresponds to less than nine days during the ozone season, April through October, when there was an exceedance of the one-hour standard. In 2000, statewide, there was one exceedance of the one-hour standard in Northern Virginia. In 2001 there were 3 exceedances of the one-hour standard, only one of those was in Northern Virginia. The data also indicate that the concentration of ozone being recorded at the monitors is decreasing. It is true that much of the ozone formation is due to weather conditions and cool summers result in fewer ozone violations, however, it is also true that reducing the precursors of ozone, one of which is regional NOx emissions, will also result in fewer exceedances of the standard.

No changes have been made to the proposal based on this comment.

265. **SUBJECT:** Environmental set aside

**COMMENTER:** Russell D. Gillespie, Duke Energy Power Services

<u>TEXT</u>: I work for Duke Energy North America which is the independent power development arm of Duke. In listening to the other commenters, I wanted to lend support to some of the statements that have been made to this point. Particularly those that support the use of a public benefit set-a-side to promote energy efficiency and renewable. I think that is a key and very important part of a NOx allocation.

**RESPONSE:** Please see response to comment #32.

No changes have been made to the proposal based on this comment.

266. **SUBJECT:** State owns allocations

**COMMENTER:** Russell D. Gillespie, Duke Energy Power Services

**TEXT:** Another thing I want to emphasize is the NOx allocation that is provided to the state of Virginia is actually an asset the state has control of. It should not be viewed as a something that belongs to utilities that have actually created the emissions in the first place. It is very important the state utilize this to ensure the reliable electric generation into the future. If an electric utility holds the majority of the allocations, they control future generation. An annual reallocation methodology would allow the state to maintain control of the future generation as it is built and to ensure the reliable sources of electric generation in the state.

**RESPONSE:** The state budget created by EPA was determined by historic emissions from existing sources operating in Virginia. The allocations are based upon the state budget. To allocate allowances and disregard the historic operations of the sources that the budget was based upon would be very disruptive to the economic vitality of the Commonwealth. The amount of allowances one has does not mean that they "control future generation" This might be true if the "holder of the allowances" were the only place that allowances could be obtained, however, transactions that have already occurred in the NOx market would suggest otherwise. Allowances will be sold on the market, and anyone is free to purchase them.

No changes have been made to the proposal based on this comment.

267. **SUBJECT**: Output based allocation methodology

**COMMENTER:** Russell D. Gillespie, Duke Energy Power Services

**TEXT:** I would propose the state consider an output based allocation methodology. For example, use lbs/megawatt hour as opposed to lbs/mmBtu. This, in effect, will encourage and promote efficient generation and not necessarily the higher consumption of fuel.

**RESPONSE:** Please see response to comment #74.

No changes have been made to the proposal based on this comment.

Dominion Resources also provided comment during the public hearing, however, those comments were also covered in their written comments. Please see responses to comments #178-#199.

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